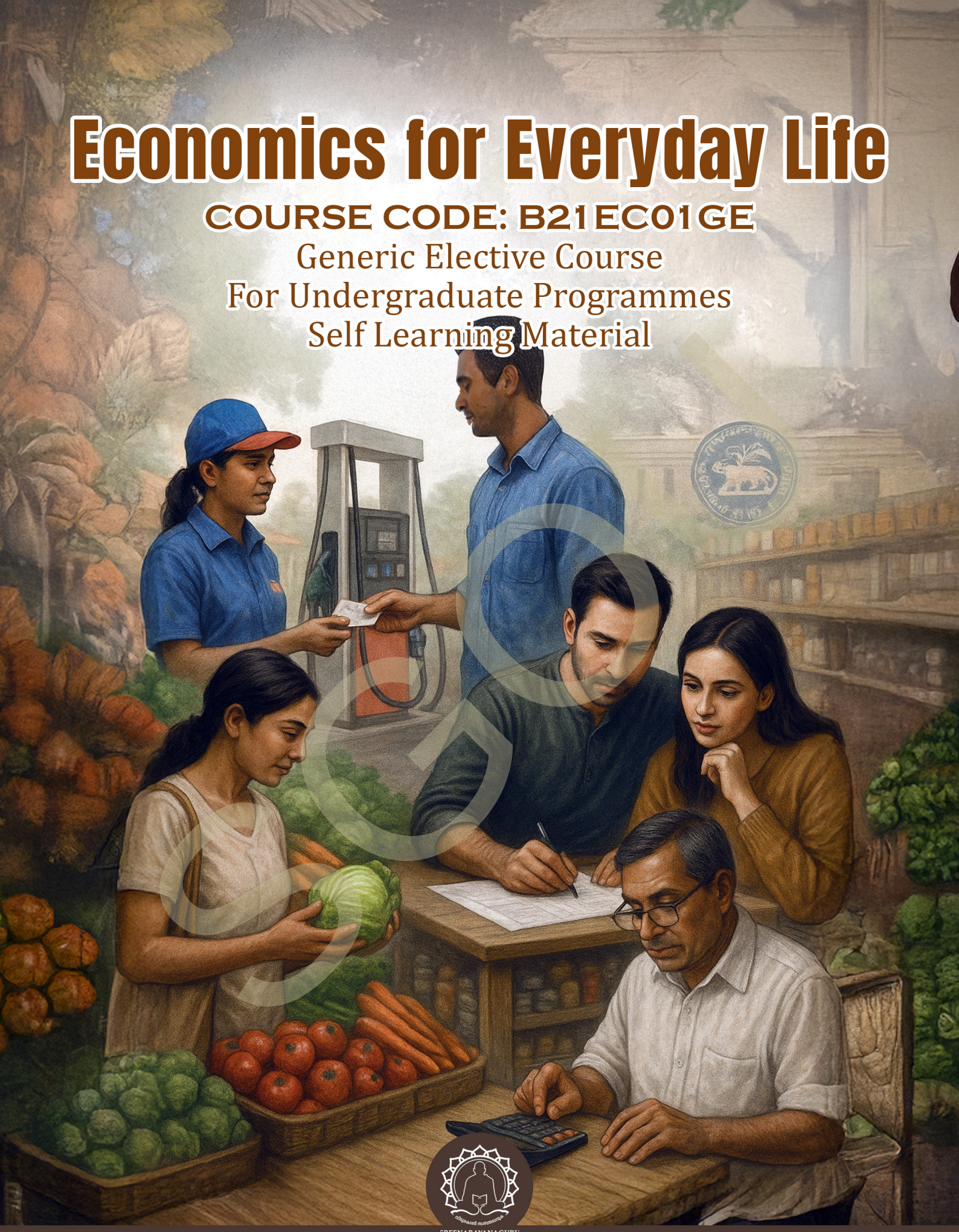
Economics for Everyday Life

COURSE CODE: B21EC01GE

Generic Elective Course
For Undergraduate Programmes
Self Learning Material



SREENARAYANAGURU
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The State University for Education, Training and Research in Blended Format, Kerala

SREENARAYANAGURU OPEN UNIVERSITY

Vision

To increase access of potential learners of all categories to higher education, research and training, and ensure equity through delivery of high quality processes and outcomes fostering inclusive educational empowerment for social advancement.

Mission

To be benchmarked as a model for conservation and dissemination of knowledge and skill on blended and virtual mode in education, training and research for normal, continuing, and adult learners.

Pathway

Access and Quality define Equity.

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Edition
May 2025

ISBN 978-81-986991-9-0

9 788198 699190

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MESSAGE FROM VICE CHANCELLOR

Dear learner,

I extend my heartfelt greetings and profound enthusiasm as I warmly welcome you to Sreenarayanaguru Open University. Established in September 2020 as a state-led endeavour to promote higher education through open and distance learning modes, our institution was shaped by the guiding principle that access and quality are the cornerstones of equity. We have firmly resolved to uphold the highest standards of education, setting the benchmark and charting the course.

The courses offered by the Sreenarayanaguru Open University aim to strike a quality balance, ensuring students are equipped for both personal growth and professional excellence. The University embraces the widely acclaimed "blended format," a practical framework that harmoniously integrates Self-Learning Materials, Classroom Counseling, and Virtual modes, fostering a dynamic and enriching experience for both learners and instructors.

The University is committed to enriching your academic experience by offering dynamic and relevant courses that connect classroom learning with real-world applications. The Generic Elective course “Economics for Everyday Life” has been thoughtfully developed to make the subject of economics accessible, relatable, and engaging for all undergraduate learners, regardless of their primary discipline. This course seeks to demystify economic concepts by linking them to everyday decisions—whether it’s budgeting, understanding inflation, or evaluating the impact of public policies. The Self-Learning Material has been meticulously crafted, incorporating relevant examples to facilitate better comprehension.

Rest assured, the university's student support services will be at your disposal throughout your academic journey, readily available to address any concerns or grievances you may encounter. We encourage you to reach out to us freely regarding any matter about your academic programme. It is our sincere wish that you achieve the utmost success.

Regards,
Dr. Jagathy Raj V.P.

01-05-2025

Contents

BLOCK
01

Basic Concepts and Methods of Economics

Unit 1

Economic Problem and Scarcity

Learning Outcomes

After completing this unit, the learner will be able to:

- discuss the central economic problem
- define economics from various perspectives
- differentiate between microeconomics and macroeconomics

Prerequisites

A small community has one bakery, one tailor, and a limited supply of water. Every morning, people gather to buy bread, have clothes stitched, and collect water for their households. However, not everyone leaves satisfied, there is not enough of everything to go around. Some return empty-handed, while others exchange goods or offer services to meet their needs. This daily routine reflects a much larger question: How do people decide, what to produce, how to produce it, and for whom? These questions lie at the heart of economics. Economics is the branch of social science that studies how goods and services are produced, distributed, and consumed. It explores the choices individuals, businesses, and governments make when faced with scarcity. Economics is the branch of social science that studies the production, distribution, and consumption of goods and services. It examines how individuals, businesses, governments, and societies allocate resources to meet their unlimited wants and needs. The term economics is derived from the Greek word *oikonomia*, which means 'household management.' People are constantly engaged in work to secure the things they need to satisfy their wants. Individuals have multiple needs and desires to fulfil. The economic problem is a fundamental issue faced by all societies.

Keywords

Economic Problems, Scarcity, Choice, Wealth, Welfare, Growth, Microeconomics, Macroeconomics

Discussion

1.1.1 The Economic Problem: Scarcity and Choice

Economics is the branch of social science that deals with how people use their scarce resources to satisfy unlimited wants. The means to satisfy these wants are limited. The problem of using scarce resources to satisfy unlimited wants is called the central economic problem. Figure 1.1.1 shows the central economic problem of an economy.

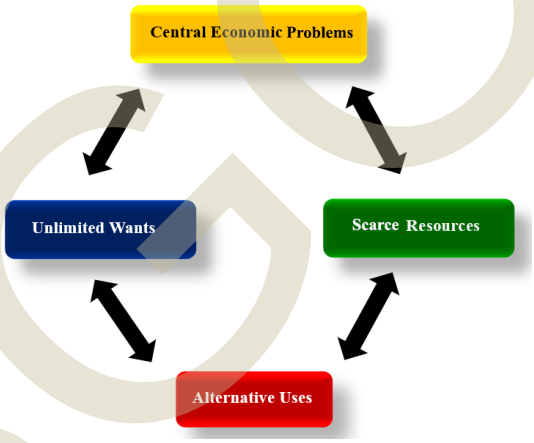

Fig 1.1.1 Central Economic Problems

During a sudden outbreak of rabies in a rural area, dozens of people rush to the nearest government hospital seeking the anti-rabies vaccine. The vaccine is provided free of cost, but the hospital has only a limited number of doses available. Despite the urgency and the fact that the treatment is free of charge, not everyone can be treated immediately. This is a clear example of scarcity, when the demand for a good exceeds its available supply.

In economics, scarcity refers to the gap between limited resources and unlimited wants. It means that no matter how essential or free a good maybe if there is not enough of it to go around, people and societies must make difficult choices.

This is the fundamental economic problem that how to use scarce resources to get the most satisfaction or benefit. Because of scarcity, individuals and societies are constantly

faced with the problem of choice-deciding what to prioritise and what to forego. As there are limited resources, the choice is given to decide what one wishes to get by sacrificing one of their demands. When the choice is made, there is a sacrifice involved in it. The decision to consume a product also means a decision not to consume another.

One product can only be consumed by giving up something in exchange. To exemplify, a farmer has 10 acres of land; he has a choice to either grow wheat or cotton on it. Limited land is a scarcity of resources. The alternative crops, wheat and cotton, show that we have choices. To grow one of the two crops, the other crop's production has to be sacrificed; this is the opportunity cost involved. So, the choice involves sacrifice.

Several problems can arise from choices that are made by people, whether they are individuals, firms, or the government. Choices or alternatives (or opportunity cost) refer to the cost of sacrifice that is made to choose the next best alternative. They are illustrated in terms of a production possibility curve. A production possibility curve shows all possible combinations of two goods that a society can produce within a specified period when its resources are fully and efficiently employed. A detailed explanation of the opportunity cost and production possibility curve is given in the next unit.

The scarcity of resources compels us to make three important choices. They are:

1. Make their choices between the economic goals they want to achieve
2. Between the goods and services, they want to produce
3. Between the alternative uses of their resources to maximise their gains

Further scarcity of resources poses another problem of choice, namely, who should get and in what quantity. This means that the national product should be distributed among various members of the society. Thus, scarcity and choice are the fundamental economic problems in society. To solve the fundamental economic problem, the economy has to make the right decisions on the following questions:

1. What to produce and how much to produce?
2. How to choose a production method?
3. For whom to produce or how to distribute the social output?
4. How much is to be allocated for future economic growth?

All these questions have their roots in the scarcity of resources. If resources were unlimited, like human wants, there would be no economic problem.

1. What to produce and how much to produce

The first and most important problem facing an economy is what to produce and in what quantities. This problem arises directly from the scarcity of resources. If there were no scarcity of resources, we could have produced all goods in desired quantities.

It is a fundamental economic question that refers to the decision-making process of determining which goods and services to produce. If an economy decides to produce more units of one good, it will necessitate the withdrawal of resources from the production of other commodities. Therefore, an economy has to decide how many resources should

be used for the production of sugarcane, how many resources should be used for wheat, or how many for cotton. Similarly, it has to decide how many bicycles or motor cars should be produced. The choice must not be of the type either or, but some combination of both. Thus, with fixed and scarce resources, society has to cut down the production of some goods to produce other goods. For example, during wartime, society has to withdraw resources from the production of civilian goods to produce more war goods like guns, warplanes and other war equipment. Because of the scarcity of resources, we cannot have more guns and more butter; some butter has to be sacrificed for the sake of more guns.

Then, what quantities of these goods should be produced has also to be decided. This decision is key in allocating resources efficiently and meeting the demands of consumers.

2. How to choose a production method?

The question of how to produce relates to the choice of the combination of factors and the particular technique to use in producing goods and services. It deals with the choice between labour-intensive technology and capital-intensive technology. Generally, a labour-abundant country like India will adopt labour-intensive technology, and a capital-abundant country like the USA will adopt capital-intensive technology. The choice of techniques used in the production process depends on the availability of resources in the economy.

The society is confronted by the problem of choosing between the two methods of production. Further, the problem of how to produce means which combination of resources is to be used for the production of goods and which technology is to be made use for their production. The scarcity of resources demands that goods should be produced with the most efficient methods.

3. For whom to produce or how to distribute the social output?

For whom to produce means how the national product is to be distributed among the members of the society. In other words, who should get how much of the total amount of goods and services? It is important to note that the distribution of national output depends on the distribution of money income. Those people who have higher incomes would have a larger capacity to buy goods. Those who have lower incomes would have lower purchasing power to buy commodities. The more unequal the distribution of income is, the more unequal the distribution of the national product will be. The more equal the distribution of income, the more equal the distribution of the national output. Since goods and services produced in every economy are limited, no society can satisfy all the wants of its entire population.

4. How much is to be allocated for future economic growth?

How much to allocate for future economic growth is another basic economic problem. Economic growth is the process whereby the real per capita income of a country increases over a long period. The growth of the economy will depend on the decision of how much to consume out of the current national income and how much to save for investment purposes. If all that is produced is consumed away and nothing is saved, then nothing will be left for investment. No investment means no capital formation. And the zero rate of net capital formation means the absence of economic growth in the economy. Rapid

economic growth can be attained by fully utilising the available resources. Economics, as a social science, analyses how individuals and society make their choices for the optimum utilisation of resources.

All these central problems of an economy are interrelated and interdependent. They stem from the fundamental economic problems of scarcity of means and multiplicity of ends, which leads to the problem of choice or encompassing of resources. The solutions to these basic economic problems in the different economic systems are discussed in the next unit.

1.1.2 Definitions of Economics

On account of the difficulty of defining economics precisely, Jacob Viner, the Canadian economist, defined economics as follows: "Economics is what economists do." The definitions of economics are broadly classified in Figure 1.1.2.

Fig 1.1.2 Definitions of Economics

1.1.2.1 Wealth Definition (Classical View)

Adam Smith (1723-1790), also known as the father of political economy, defined economics as the science of wealth. His emphasis on wealth as a subject matter of economics is implicit in his great book- *An Inquiry into the Nature and Causes of the Wealth of Nations*, , more popularly known as *Wealth of Nations*-published in 1776. To him, wealth may be defined as those goods and services that command value in exchange. Economics is concerned with the generation of the wealth of nations.

1.1.2.2 Welfare Definition (Neo-classical View)

Alfred Marshall (1842-1924), in his book *Principles of Economics* (1890), defined economics as the study of mankind in the ordinary business of life. It inquires how he gets his income and how he uses it. It examines the part of individual and social action, which is most closely connected with the attainment and with the use of material requisites of well-being. It is, on the one side, a study of wealth, and on the other, and more important side, is a part of the study of man. In short, according to Alfred Marshall, economics is the science of material welfare.

1.1.2.3 Scarcity Definition

Lionel Charles Robbins(1898-1984), a British economist, defined scarcity in his book *An Essay on the Nature and Significance of Economic Science* (1932) as: Scarcity means that the ends are unlimited, but the means are limited. Robbins's definition of scarcity emphasises the idea that human wants and needs are unlimited, but the resources available to satisfy those wants and needs are limited. This fundamental imbalance between unlimited wants and limited resources gives rise to the problem of scarcity.

Key aspects of Robbins's scarcity definition:

1. **Unlimited wants:** Human wants and needs are infinite and diverse.
2. **Limited means:** The resources available to satisfy those wants and needs are limited.
3. **Economic Problem:** Scarcity gives rise to the economic problem of how to allocate limited resources to meet unlimited wants.
4. **Choice and Prioritisation:** Scarcity necessitates choice and prioritisation, as individuals and societies must decide how to allocate limited resources.

1.1.2.4 Growth Definition

Paul Anthony Samuelson (1915-2009) is called the father of modern economics and the first American to win the Nobel Prize in Economics. He gave his definition of economics in his book *Foundations of Economic Analysis*, published in 1946. According to Samuelson, "Economics is a social science concerned chiefly with the way society chooses to employ its resources, which have alternative uses, to produce goods and services for present and future consumption."

1.1.3 Microeconomics and Macroeconomics

Imagine an economy as a big forest. Microeconomics is like looking at each tree- how it grows, gets sunlight, and competes with other trees for water. In the same way, microeconomics studies individual people, businesses, and markets how they make choices, set prices, and use resources.

In contrast, macroeconomics looks at the entire forest- its overall health, how it expands or contracts, the impact of climate patterns, and what happens when wildfires or storms strike. Similarly, macroeconomics deals with the big picture: national income, inflation, unemployment, and economic growth.

Modern economic analysis is usually classified into either microeconomics or macroeconomics. These terms were coined by Ragnar Frisch of Oslo University in the 1920s and have since become central to economic study.

The word 'micro' comes from the Greek *mikros*, meaning 'small', and 'macro' from macros, meaning 'large'. Microeconomics was shaped by Adam Smith, while macroeconomics owes much to John Maynard Keynes.

1.1.3.1 Meaning of Microeconomics

Microeconomics is like zooming in on a single shop inside the mall- analysing how it sets prices, how customers decide what to buy, and how the shop manages its staff and stock. It deals with the decisions of individual units like consumers, firms, and workers.

Microeconomics is the branch of economics based on the economic behaviour of small economic units. The economic units studied in microeconomics are consumers, workers, savers, business managers, firms, individual industries, and markets. Consumers decide how much of various goods to purchase, workers decide what jobs to take, and business people decide how many workers to hire and how much output to produce. Microeconomics encompasses the factors that influence these choices and the way these innumerable small decisions merge to determine the workings of the entire economy. Because of the important effects that prices have on these individual decisions, microeconomics is frequently called price theory.

Microeconomic theory is capable of dealing with some of the most important social issues of the present day. The important among them are environmental pollution, poverty and welfare programmes, monopolies and consumer wellbeing, labour unions and real wages, rising medical expenditure, discrimination in employment, energy problems, taxation and work incentives.

1.1.3.2 Importance or Uses of Microeconomics

Microeconomics is useful in analysing how prices are determined in different markets and how resources are allocated to various uses. Microeconomic theory can be used as the basis for conditional predictions. For example, if the demand curve is negatively sloped and the supply curve is positively sloped, then a price rise above the equilibrium price will create a surplus in the market.

Microeconomic theory provides the analytical tools for economic policies affecting prices and production. The effect of government policies on the prices of commodities and wages and their impact on the allocation of resources can be analysed with the help of microeconomics. Microeconomics can be used to examine the conditions of economic welfare. Economic welfare consists of the subjective satisfaction that individuals get from consuming goods and services and from enjoying leisure. It can suggest methods to raise the level of consumption of goods and services.

Microeconomics is useful in decision-making in the employment of resources in government programmes. Because of the availability of the tested methods of analysing the costs and benefits of a programme, price theory can help decision-makers in achieving efficiency in the use of scarce resources.

1.1.3.3 Limitations of Microeconomics

a. Microeconomic analysis is based on the assumption of full employment. But the fact is that full employment is only an exception in the real world.

b. Microeconomic theories apply to laissez-faire capitalism, characterised by perfect competition. Since laissez-faire and perfect competition are nonexistent, the applicability of microeconomics is limited.

c. Microeconomics concentrates on the working of the part of an economy. Thus, it is inadequate in providing an overall picture of the functioning of an economy.

d. Microeconomic theories are inadequate in analysing several economic

problems. This is because what is true of an individual unit need not be necessarily true of the economy as a whole.

1.1.3.4 Meaning of Macroeconomics

Macroeconomics looks at the entire mall-how many people are shopping overall, whether sales across all stores are rising or falling, how much rent shop owners pay, and how these trends reflect the health of the economy as a whole.

Macroeconomics is the branch of economics concerned with the economic magnitudes relating to the economic system as a whole rather than to individual firms. It covers variables like total employment, total consumption, aggregate demand and supply, inflation, total investment, trade cycle, national income, etc. Macroeconomics studies how large aggregates, such as total employment, the national product of an economy, and the general price level, are determined. Macroeconomics is, therefore, a study of aggregates, and it is also known as aggregate economics.

1.1.3.5 Importance or Uses of Macroeconomics

An analysis of the economy in its aggregate terms is helpful in many ways. Firstly, it helps to understand the functioning of the economy. Secondly, macroeconomics is helpful in the formulation of economic policies. Most nations are faced with the problems of overpopulation, poverty, unemployment, etc. Macroeconomics helps to find out why these evils are emerging and suggests remedies for their eradication.

Thirdly, macroeconomics tries to solve the problem of general unemployment and fourthly, macroeconomics is helpful in the analysis of the causes of business fluctuations and in suggesting corrective measures.

Fifthly, a proper analysis of monetary problems is possible only with the help of macroeconomics and sixthly, the progress of the resources and capabilities of the economy can be evaluated with the help of macroeconomics.

1.1.3.6 Limitations of Macroeconomics

1. The greatest danger of macroeconomics is the danger of excessive generalisation from individual experience to the system as a whole.
2. The measurement of aggregates that are composed of heterogeneous elements is a serious problem.
3. Some aggregates of macroeconomics may not have any significant interest
4. An aggregate may not produce the same impact on all sectors.

1.1.3.7 Key Differences Between Micro and Macroeconomics

Table 1.1.1 Key Differences Between Microeconomics and Macroeconomics

Microeconomics	Details Covered
Microeconomics focuses on the behaviour of individual consumers, firms, and markets	Macroeconomics examines aggregate variables, such as GDP, inflation, and unemployment
Microeconomics analyses how prices are determined and how resources are allocated	Macroeconomics studies the factors that influence economic growth and development
Studies different types of markets, such as perfect competition, monopoly, and oligopoly	Analyses the causes and effects of changes in the general price level
Seeks to understand how resources can be allocated efficiently	It seeks to understand how the economy can be stabilised and how economic fluctuations can be reduced
Microeconomics is also known as price theory	Macroeconomics is also known as income theory
Microeconomics is based on partial equilibrium analysis	Macroeconomics is based on general equilibrium analysis
In microeconomic theory, analysis is conducted by assuming that other things remain constant(*ceteris paribus*)	Macroeconomic analysis is not based on the *ceteris paribus* assumption
Microeconomics takes into account the aggregates over homogeneous or similar products	Macroeconomics takes into account the aggregates of heterogeneous or dissimilar products

Thus, for an overall perspective of how the entire economy works, it is necessary to have an understanding of economics at both the micro and macro levels.

Recap

- Central economic problem: using scarce resources to satisfy unlimited wants
- Scarcity: demand exceeds supply, even at zero price
- Economics studies: behaviour of individuals, firms, households, and governments under scarcity
- Unlimited wants vs. limited resources: the root of economic issues
- Scarcity → choice: limited resources force people to choose
- Fundamental problems: scarcity and choice
- Basic economic questions: What to produce? How to produce? (choice of method), For whom to produce? (Distribution)
- Resource allocation: a key issue for individuals and society
- Adam Smith defined economics as science of wealth; father of political economy
- Alfred Marshall defined economics as science of material welfare
- Lionel Robbins defined economics as study of scarcity; unlimited wants vs. limited resources
- P.A. Samuelson: economics is the study of how society chooses to use scarce resources for present and future needs
- Two branches of economics: microeconomics and macroeconomics
- Ragnar Frisch coined terms micro (*mikros* = small) and macro (macros = large)
- Microeconomics: small economic units (individuals, firms); developed by Adam Smith
- Macroeconomics: whole economy (national income, inflation, etc.); developed by J.M. Keynes

Objective Questions

1. What is the main cause of all economic problems?
2. Who defines economics in terms of dynamic growth and development?

3. Did Alfred Marshall agree with the economic studies about wealth?
4. Who is known as the father of economics?
5. When does an economy succeed in producing resources efficiently?
6. What are the central problems of an economy?
7. What is microeconomics?
8. What is macroeconomics?

Answers

1. Scarcity
2. P. A Samuelson
3. Yes
4. Adam Smith
5. When goods and services are produced, without resources being wasted
6. What to produce, how to produce, whom to produce and how to achieve economic growth
7. Microeconomics is the branch of economics based on the economic behaviour of small economic units
8. Macroeconomics is the branch of economics that studies the behaviour and performance of the overall economy

Assignments

1. Discuss the basic problems of an economy.
2. Distinguish between microeconomics and macroeconomics.
3. Describe the four basic economic questions that arise due to scarcity.
4. Compare and contrast the definitions of economics given by Adam Smith,

Alfred Marshall, Lionel Robbins, and Paul Samuelson.

5. Describe the importance and limitations of macroeconomic analysis.
6. Briefly outline the limitations of applying microeconomic theory.
7. Explain the importance of microeconomics in policymaking and resource allocation.

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Suggested Reading

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Unit 2

Opportunity Cost

Learning Outcomes

After completing this unit, the learner will be able to:

- familiarise themselves with the concept of opportunity cost
- discuss the production possibility curve
- know the solutions to basic economic problems

Prerequisites

In daily life, people often face tough choices, like deciding whether to spend an hour studying or working on a hobby. Choosing one activity means missing out on the benefits of the other. This concept, known as opportunity cost, lies at the heart of economics.

In the first unit, you learned about fundamental ideas like scarcity, choice, and the difference between microeconomics and macroeconomics. Now, we move forward to explore how these choices play out in entire economies.

Ravi stood at the bus stop one morning, holding two coins in his hand. He could either buy a packet of milk for his mother or a pen for his schoolwork. Both were important, but he could only choose one. After a moment of thinking, he bought the milk and went back home. That day, he borrowed a pen from his friend in class.

Life is full of such little moments of decision-making. Some choices are simple, while others are more difficult. Every time we choose one thing over another, we give up something. That "something" we give up, whether it is a thing, time, or even a chance, is part of a hidden cost we rarely think about.

Imagine a farmer with one piece of land. He can grow rice or vegetables. He

chooses rice, but it means he cannot grow vegetables on that land at the same time. Similarly, a student may choose to study in the evening, missing out on a cricket match with friends. These everyday examples show how we must often choose between options when we cannot have both.

Such choices are common not just in personal life, but also in larger settings like schools, hospitals, and governments. Whenever there are limited resources and many needs, people must make decisions. Understanding these decisions helps us see why some things are done while others are left behind.

Keywords

Production Possibility Curve (PPC), Free Price Mechanism, Controlled Price System, Mixed Economy, Concave, Alternative Cost, Resource Allocation

Discussion

1.2.1 Opportunity Cost

Opportunity cost is one of the major principles upon which economic theory is constructed. The problem of allocating resources emerges from the scarcity of factors. Because scarcity exists, the cost of having one thing is the loss experienced from not having something else. Allocative efficiency can be increased by rearranging the available resources based on the estimation of opportunity cost.

Every day, people face choices that involve trade-offs. For example, if you spend your evening studying for an exam, you give up the chance to watch a movie or hang out with friends. The value of what you give up-the next best option-is called opportunity cost. In economics, the opportunity cost of producing a good is the value of the most valuable alternative that must be sacrificed to obtain the resources needed for that good. It's also called the alternative cost. This concept applies both to individuals and entire nations. For instance, a farmer who uses his land to grow wheat faces an opportunity cost: the rice he could have grown instead, assuming rice is the next best crop for that land. Similarly, if a worker can produce either a washing machine or a refrigerator, and he is assigned to make a washing machine, the opportunity cost is the refrigerator he did not produce.

Understanding opportunity cost helps reveal the true cost of any decision, highlighting the sacrifices involved in choosing one option over another. The relative price of goods and services represents their opportunity cost. The resources will remain employed in a

particular production process only if they are paid a monetary income sufficient to induce them to stay in the industry. If the same collection of factors can produce either one tractor or two motorcycles, then the price of one tractor will be twice that of a motorcycle. In other words, the opportunity cost of producing one tractor is the production of two motorcycles. So, scarcity forces a choice from among alternatives. Thus, by opportunity cost, we mean that the cost of anything is the cost of an alternative or opportunity cost that is sacrificed.

To sum up, opportunity cost plays a central role in shaping the PPC. The production possibility curve reflects the trade-off between two goods, showing that producing more of one requires sacrificing some of the other**.** As resources are allocated to one commodity, there is a sacrifice of resources for the other, leading to diminishing returns. This explains the concave shape of the PPC.

1.2.2 Production Possibility Curve

Since human wants are unlimited and the means to satisfy them are limited, every society is faced with the fundamental problem of choosing and allocating its scarce resources among alternative uses. People always want more - more food, more clothes, more entertainment - but the resources available to satisfy these wants are limited. This creates a fundamental problem for every society, how to choose and allocate scarce resources among many possible uses. Think of a family with a fixed amount of money to spend on two things viz groceries and electricity bills. If they decide to spend more on groceries, they must spend less on electricity. If they want to use more electricity, they will have less money left for food. This trade-off reflects the choices societies face too.

The Production Possibility Curve (PPC) is a tool economists use to illustrate this problem. It's a graph showing the different combinations of two goods that can be produced when resources are fixed. To produce more of one good, society must give up some quantity of the other - just like the family balancing groceries and electricity.

The production possibility curve is an analytical tool that is used to illustrate and explain this problem of choice. In other words, it is a graph that indicates the various production possibilities of two commodities when resources are fixed. The production of one commodity can only be increased by sacrificing the production of the other commodity. The production possibility curve is known by different names, such as production possibility frontier production possibility boundary or product transformation curve. The PPC illustrates scarcity, choice, opportunity cost and efficiency.

The production possibility curve is based on the following assumptions:

1. Only two goods, X (consumer goods) and Y (capital goods), are produced in different proportions in the economy.
2. The same resources can be used to produce either or both of the two goods and can be shifted freely between them.
3. The production techniques are given and constant. The time period is short.
4. When the resources are transferred from one use to another (production of one good to another), productivity declines.

5. The economy's resources are fully employed and technically efficient.

Given these assumptions, we construct a hypothetical production possibility schedule of such an economy in Table 1.2.1. The production possibility schedule represents the various choices open to society.

Table 1.2.1 Production Possibility Schedule

Production possibilities	Consumer goods(X) (in tons)	Capital goods(Y) (in tons)
A	0	250
B	100	230
C	150	200
D	200	150
E	250	0

Table 1.2.1 shows the production possibility schedule, giving us a clear view of what can be achieved within our resources.

In Table 1.2.1, all the production possibilities for an economy produce only two goods: consumer goods (X) and capital goods (Y). The table shows the different combinations of consumer goods and capital goods the economy could produce. If all resources were devoted to the production of consumer goods, the economy could produce 250 consumer goods, but zero tons of capital goods. On the other hand, if all resources were devoted to the production of capital goods, the economy could produce 250 capital goods, but zero tons of consumer goods. The production possibilities of B, C, and D show the intermediate combinations of production.

The marginal rate of transformation measures the slope of the PPC. MRT is the number of units of good Y that will be forgone to produce an extra unit of good X while keeping the factors of production and technology constant. In other words, it is the ratio of the number of units of a commodity sacrificed to gain one more unit of another commodity. The formula for calculating MRT is: $\Delta Y/\Delta X$, where ΔY represent the change in the quantity of one good and ΔX represent the change in the quantity of the other good.

When all production possibilities for the production of consumer goods and capital goods are graphed, we get a production possibility curve depicted in Figure 1.2.1.

The Production Possibility Curve (PPC) illustrates the different combinations of two goods - capital goods (represented on the Y-axis in tons) and consumer goods (represented on the X-axis in tons) - that can be produced efficiently using all available resources. The curve AE shows the maximum limit of production, where every point along the curve represents an efficient use of resources. Points B, C, and D on the curve indicate productive combinations of both goods. Point A represents the production of capital goods only, while Point E reflects the production of consumer goods only. Point F lies inside the curve, signifying underutilisation of resources or inefficiency. On the other

hand, Point G lies outside the curve and represents a level of production that is currently unattainable with existing resources and technology. The PPC, formed by joining points A, B, C, D, and E, helps in understanding the concept of opportunity cost and the trade-offs involved in resource allocation.

Fig 1.2.1 Production Possibility Curve

1.2.2.1 Characteristics of the Production Possibility Curve

After studying the PPC schedule and the graphical representation of PPC it is very essential to understand the characteristics of PPC. It is given in the Table 1.2.2.

Table 1.2.2 Characteristics of the Production Possibility Curve

Shape of the PPC	It is concave to the point of origin
Reasons for the Shape of PPC	PPC is concave-shaped due to the trade-off between two commodities and helps identify the opportunity cost of shifting resources from producing one good to another
Opportunity Cost	The PPC highlights the cost of choosing one option over another. Moving along the curve shows how the production of one good must decrease to increase the production of the other
Efficiency and Inefficiency	Points on the PPC represent an efficient allocation of resources
	Points below the PPC represent inefficient/ underutilisation of the allocation of resources
	Points above the PPC are unattainable with the allocation of resources

Scarcity	It shows the limits of what can be produced with available resources
Helps to Identify Economic growth	An outward shift in the PPC illustrates economic growth, and an inward shift in the PPC illustrates the reduction in economic capacity

1.2.2.2 Types of Production Possibility Curve

There are three types of production possibility curves:

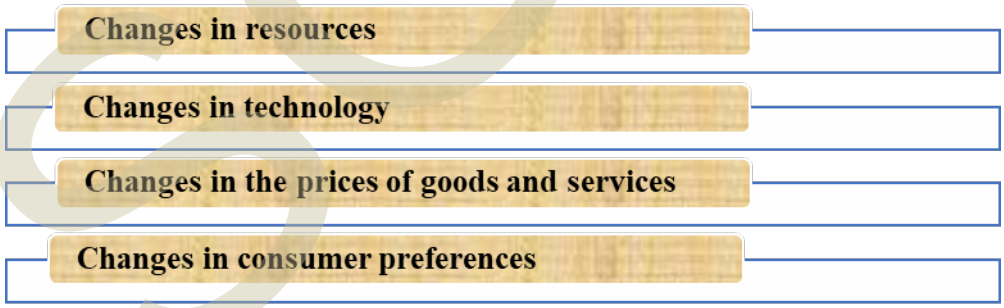
1. **Straight line PPC:** It reflects the constant opportunity cost as the resources are perfectly adaptable for the production of both goods.
2. **Concave PPC:** It reflects the increasing opportunity costs as more of one good is produced, requiring progressively larger sacrifices of the other good.
3. **Convex PPC:** It reflects that the opportunity cost decreases as one moves along the curve and is not easily adaptable.

1.2.3 Shift in the Production Possibility Curve

One of the assumptions of PPC is fixed resources. Due to the increase or decrease in the resources, the productive capacity of the economy keeps changing constantly. These changes result in the shift of PPC.

The production possibility curve can be shifted by four important factors: Changes in resources, changes in technology, changes in prices, and changes in preferences. It is shown in the chart given in Table 1.2.1:

Table 1.2.1 Reasons for the Shift of the Production Possibility Curve



First, an increase in the availability of resources will cause the PPC to move outwards, and a decrease in the availability of resources will cause the PPC to move inwards.

Second, technological advances can lead to an outward shift of the PPC.

Third, changes in the prices of goods and services can cause the curve to shift. For example, if the price of goods and services increases, producer's incentive to produce goods decreases, shifting the curve inwards, and vice versa.

Finally, the changes in consumer preferences can also affect the position of PPC. For

example, if the consumer prefers more of one good over another, production of that good will increase and cause the curve to move outwards, and vice versa.

As the change in PPC shows either an increase or a decrease in the productive capacity of the economy, the change in PPC can be of two types. They are:

1. Shift in PPC (Change in productive capacity to both goods

2. Rotation in PPC (Change in productive capacity to one good only)

1.2.3.1 Shift in PPC (Change in Productive Capacity to both Goods)

The Production Possibility Curve (PPC) shifts when there are changes in resources or technology affecting both capital and consumer goods. Let us explain this with the help of figures.

When there is an improvement in technology or an increase in available resources, the economy becomes capable of producing more of both goods. As a result, the PPC shifts outward (rightward) from curve BB_1 to CC_1 in Figure 1.2.2. This outward shift indicates economic growth. On the other hand, if there is a decline in technology or a reduction in resources (due to war, natural disaster, economic crisis, etc.), the economy can produce less of both goods. In this case, the PPC shifts inward (leftward) from BB_1 to AA_1, showing a decline in production capacity. In short, the direction of the PPC shift depends on whether the overall productive capacity of the economy increases or decreases.

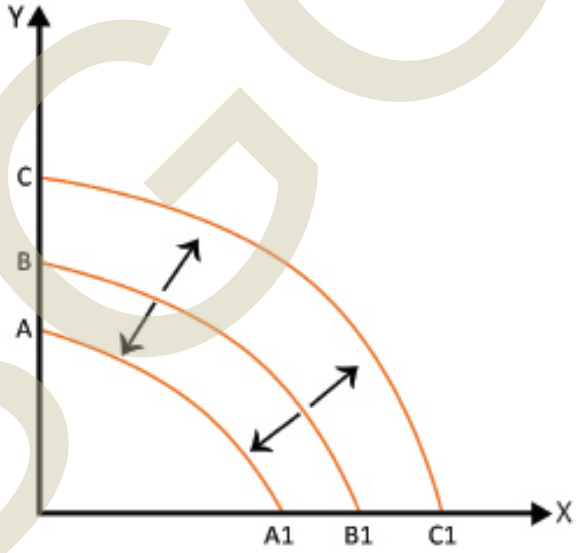


Fig 1.2.2 Shift in PPC (Change in productive capacity to both goods)

1.2.3.2 Rotation in PPC (Change in Productive Capacity to one Good only)

When there is a change in technology or resources concerning only one good, the PPC curve will rotate either for the commodity on the X-axis or the commodity on the Y-axis. Let us explain with the help of figures.

Fig 1.2.3 Rotation for the Commodity on the X-axis

When there is an advancement in the technology or growth of resources for the production of the commodity on the X-axis (consumer goods), then the PPC will rotate rightward from AB to AB1. On the other hand, when there is degradation in the technology or reduction of resources for the production of the commodity on the X-axis (consumer goods), then the PPC will rotate leftward from AB to AB2. The rotation for the commodity on the Y-axis is given in Figure 1.2.4.

Fig 1.2.4 Rotation for Commodity on the Y-axis

When there is an advancement in the technology or growth of resources for the production of the commodity on the Y-axis (capital goods), then the PPC will rotate rightward from

AC to AC1. On the other hand, when there is degradation in the technology or reduction of resources for the production of the commodity on the Y-axis (capital goods), then the PPC will rotate leftward from AC to AC2.

1.2.2.4 Limitations of the Production Possibility Curve

Limitations of the Production Possibility Curve include:

1. It cannot consider factors such as technological advances.
2. PPC says nothing about which goods people want and which provide the most satisfaction but only indicates available options.
3. They do not consider the impact of trade restrictions.
4. They are static and do not account for changes in demand over time.
5. The curve assumes that all inputs and resources are used efficiently, which may not always be the case in reality.
6. They cannot consider external factors that may affect production, such as taxes or subsidies.

Therefore, PPC helps us understand the economy's choice in allocating resources effectively. It demonstrates economic concepts like efficiency, scarcity, and opportunity cost, and is a critical tool in the decision-making process.

1.2.3 Solutions to Basic Economic Problems in Different Economic Systems

Uneven distribution of natural resources, lack of human specialisation and technological advancement, etc., hinder the production of goods and services in an economy. Every economy has to face the problems of what to produce, how to produce, and for whom to produce. More or less, all the economies use two important methods to solve these basic problems. These methods are:

(a) Free price mechanism and

(b) Controlled price system or State intervention

A free price mechanism is a system that guides and coordinates the decisions of every individual unit within an economy through prices determined by the free interaction of demand and supply, without government intervention. In this system, the price of goods and services settles at a point where the quantity demanded equals the quantity supplied, known as the market equilibrium.

For example, think of a farmer's market where sellers bring fruits and buyers decide how much to buy. If apples are scarce, their price rises, encouraging farmers to bring more apples and buyers to think twice before buying too many. If apples are abundant, prices fall, encouraging more buying and less production. This natural adjustment of prices helps allocate resources efficiently, influences incomes for producers, and affects how much consumers save, spend, and produce. The price mechanism operates primarily in capitalist economies.

On the other hand, a controlled price mechanism involves government intervention where prices of goods and services are administered or fixed by the state. In socialist economies, the government plays a major role in setting prices to avoid extreme fluctuations. For instance, the government may set a ceiling price, a maximum price to keep essential goods affordable - or a floor price, a minimum price to protect producers, like farmers, from prices falling too low. This system can prevent unfair pricing but may also lead to shortages or surpluses if prices do not reflect actual supply and demand. For example, if a government sets a ceiling price on bread below the market price, demand may increase beyond supply, causing shortages. Both mechanisms aim to solve the fundamental economic problem of resource allocation but differ in their approach: one relies on market forces, the other on government control.

In a mixed economy, the government and the private sector interact in solving the basic economic problems of what to produce. However, how a capitalist, a socialist, and a mixed economic system solve their basic problems is given in the following section.

1.2.3.1 Solution to Basic Problems in a Capitalistic Economy

Under a capitalistic economy, the allocation of various resources takes place with the help of market mechanisms. The prices of various goods and services, including the prices of factors of production, are determined with the help of the forces of supply and demand. A free price mechanism helps producers to decide what to produce.

The goods that are more in demand and on which consumers can afford to spend more are produced in larger quantities than those goods or services that have lower demand. The price of various factors of production, including technology, helps to decide production techniques or methods of production. A rational producer intends to use those factors or techniques which has a relatively lower price in the market.

Factor earnings received by the employers of factors of production decide the spending capacity of the people. This helps producers to identify the consumers for whom goods could be produced in larger or smaller quantities. The price mechanism works well only if competition exists and the natural flow of demand and supply of goods is not disturbed artificially.

1.2.3.2 Solution to Basic Problems in a Socialistic Economy

In a socialist economy, the government plays a central role in planning and managing economic activities to address basic economic problems. The central planning authority decides what goods and services should be produced, how they should be produced, and who should receive them. Think of this like organising a community garden where every member's needs must be considered, but the garden's resources; land, water, seeds, are limited. A group leader plans which crops to plant, how much space each will take, and who will harvest what portion, ensuring that the garden produces enough food for everyone in the community according to priority needs. This careful planning helps avoid waste and ensures fairness.

Under a socialist economy, the government plays an important role in decision-making. The government undertakes to plan, control and regulate all the major economic activities to solve the basic economic problems. All the major economic policies are

formulated and implemented by the Central Planning Authority. In India, the Planning Commission was entrusted with this task of planning. The Planning Commission of India has now been replaced by another central authority, NITI Aayog (National Institution for Transforming India). Therefore, the central planning authority makes the decisions to overcome the economic problems of what to produce, how to produce and for whom to produce.

To understand this, think of a large factory assembly line. Instead of each worker deciding independently what to make or how much, a supervisor plans the entire production process. The supervisor assigns tasks, schedules production, and ensures resources are used efficiently to meet the factory's goals. Similarly, the central planning authority coordinates all economic activities in the country to meet the needs of its people. The central planning authority decides the nature of goods and services to be produced as per available resources and the priority of the country. The allocation of resources is made in greater volume for those goods that are essential for the nation. The state's main objectives are growth, equality and price stability. The government implements fiscal policies such as taxation policy, expenditure policy, public debt policy or policy on deficit financing to achieve the above objectives.

The methods of production or production techniques are also determined or selected by the central planning authority. The central planning authority decides whether a labour-intensive technique or a capital-intensive technique is to be used for the production. While deciding the appropriate method, the social and economic conditions of the economy are taken into consideration.

Under a socialist economy, every government aims to achieve social justice through its actions. All economic resources are owned by the government. People can work for wages, which are regulated by the government according to work efficiency. The income earned determines the aggregate demand in an economy. This helps the government in assessing the demand for goods and services by different income groups.

1.2.3.3 Solution to Basic Problems in a Mixed Economy

Practically, neither a capitalistic economy nor a socialistic economy exists in totality. Both economic systems have limitations. Consequently, a new system of economy has emerged as a blend of the above two systems, called a mixed economy. Therefore, a mixed economy is defined as a system of economy where private sectors and public sectors co-exist and work side by side for the welfare of the country. Under such economies, all economic problems are solved with the help of free price mechanisms and controlled price mechanisms (economic planning).

A free price mechanism operates within the private sector; hence, prices are allowed to change as per the demand and supply of goods. Therefore, the private sector can produce goods as per their demand and price in the market. The government may control and regulate the production of the private sector through its monetary policy or fiscal policy. On the other hand, a controlled price mechanism (economic planning) is used for the public sector by the planning authority. The goods and services to be produced in the public sector, hence, are determined by the central planning authority.

The private sector determines the production technique or production method based on factor prices, availability of technology, etc. On the other hand, the production technique or production method for the public sector is determined by the central planning authority. While determining the production technique for the public sector, national priority, national employment policy, and social objectives are major considerations.

The private sector allocates its resources to produce those goods that are demanded by people who command high purchasing power. Although production by the private sector is sometimes controlled and regulated by the government through various policies such as licensing policy, taxation policy, subsidy, etc., the price determined by the free price mechanism may go beyond the purchasing power of the low- or marginal-income group**.** Therefore, the government may undertake the production of certain goods in its own hands. The rationing policy is also introduced to provide essential goods at a reasonable price to the poor people. The government, thus, ensures social justice through its actions in the mixed economy.

Recap

- The opportunity cost of any good is the most valuable alternative that must be sacrificed to obtain the inputs to produce the good
- The production possibility curve is a graph that indicates the various production possibilities of two commodities when resources are fixed
- The production of one commodity can only be increased by sacrificing the production of the other commodity
- Due to the increase or decrease in the resources, the productive capacity of the economy keeps changing constantly
- The PPC can be shifted by changes in resources, changes in technology, changes in prices, and changes in preferences
- Uneven distribution of natural resources, lack of human specialisation and technological advancement, etc., hinder the production of goods and services in an economy
- Every economy has to face the problems of what to produce, how to produce, and for whom to produce
- All the economies use two important methods to solve these basic problems. These methods are: (a) Free price mechanism and (b) Controlled price system or State intervention

Objective Questions

1. What is the cost of the next best alternative called?
2. What is the graphical tool used to show different production combinations?
3. What is the shape of a typical Production Possibility Curve (PPC)?
4. What does MRT stand for?
5. What kind of PPC indicates increasing opportunity cost?
6. Which type of PPC reflects constant opportunity cost?
7. What economic system uses a free price mechanism?
8. Which economic system uses central planning authority?

Answers

1. Opportunity cost
2. PPC
3. Concave
4. Marginal Rate of Transformation
5. Concave
6. Straight-line
7. Capitalism
8. Socialism

Assignments

1. Explain opportunity cost and production possibility curve. Discuss thefactrors that can lead to a shift in the production possibility curve.

2. Explain the reasons for the shift in the production possibility curve, and graphically explain the shift in the PPC.
3. What is the solution to basic economic problems in different economic systems?
4. Define opportunity cost with suitable real-life examples.
5. Explain the shape and characteristics of the Production Possibility Curve (PPC).
6. Distinguish between shift and rotation of the PPC with suitable diagrams.
7. Explain how basic economic problems are solved in a capitalist economy.
8. Explain the role of central planning authority in a socialist economy.
9. Compare the functioning of free and controlled price mechanisms with examples.

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Unit 3

Approaches to Economic Analysis

Learning Outcomes

After completing this unit, the learner will be able to

- discuss about positive and normative economics
- familiarise themselves with the static, dynamic and comparative analysis
- know the difference between short-run and long-run analysis
- understand the differences in the partial and general equilibrium analysis

Prerequisites

Every day, people make countless decisions, whether to save or spend, to work more hours or take a break, to buy one product over another. Behind these choices lie economic phenomena that shape the world around us. To truly understand these decisions and their impacts, economists use different methods and approaches.

In this unit, we explore how economics can be studied both as a positive science, which describes and explains what is, and as a normative science, which deals with what ought to be. We will also look at how economists analyse the economy through static methods, which study economic conditions at a point in time, and dynamic methods, which examine how things change over time. Additionally, we will learn about comparative methods and the difference between partial and general equilibrium analysis - tools that help economists understand complex economic interactions.

Just like a detective gathering clues from different sources to solve a mystery, economists combine these approaches to reveal the causes, effects, and relationships behind economic phenomena. Each method has its strengths and weaknesses, and together, they help build more advanced models and theories that explain how economies function.

Keywords

Positive Analysis, Normative Analysis, Statics, Dynamics, Comparative Statistics, Short Run and Long Run, Partial Equilibrium, General Equilibrium Analysis

Discussion

1.3.1 Positive and Normative Economics: Meaning and Differences

The dispute among economists whether Economics is a positive science or normative science is as old as Economics itself. In economics, positive and normative analysis are two distinct approaches to analysing economic phenomena. They are rightly known as the two arms of economics. It is important to know the meaning and difference between positive and normative economics.

1.3.1.1 Meaning of Positive Economics

Positive economics is a scientific approach that focuses on describing and explaining economic phenomena without making value judgments. It is concerned with explaining what is. It concentrates on the description, quantification, and clarification of economic developments and allied matters. This subdivision of economics relies on objective data analysis, relevant facts, and figures. Therefore, it tries to establish a cause-and-effect relationship that can help to determine or test the advancement of economic theories. An example of a positive statement is: The unemployment rate is currently at 4 per cent. The characteristics of positive economics are given in Table 1.3.1.

Characteristics of Positive Economics

- It aims to be objective and unbiased
- It describes economic phenomena and relationships
- It explains why economic phenomena occur
- It is testable and can be proven or disproven using empirical evidence

1.3.1.2 Meaning of Normative Economics

When people discuss whether a city should build a new park, they often express opinions like, "The city should build the park to improve everyone's quality of life," or "The park should only be built if it doesn't raise taxes." These statements are about what ought to happen, not statements of fact that can be proven right or wrong. This

is what normative economics is about—it involves making judgments and expressing views on what is desirable or what should be done in economic activities. These value judgments come from beliefs shaped by ethical, political, philosophical, and religious ideas. Unlike positive economics, which is based on scientific analysis and facts, normative economics focuses on opinions and ideologies. For example, a normative statement is: "The government should take action to reduce the rate of unemployment." This reflects a value-based opinion rather than an objective fact.

Normative economics is a value-based approach that involves making judgments about what ought to be or what is desirable . Value judgement means the conceptions of the people about what is good or what is bad. These conceptions regarding the values of the people are based on the ethical, political, philosophical, and religious beliefs of the people and are not based on any scientific logic or law. It focuses on ideological and opinion-oriented statements towards economic activities. An example of a normative statement is that the Government should take action to reduce the rate of unemployment. The characteristics of normative economics are given in below.

Characteristics of Normative Economics

- Normative analysis is subjective and based on personal opinions or values.
- It prescribes what should be done or what is desirable.
- It evaluates economic phenomena and policies based on their desirability.
- It is based on value judgments and ethical considerations.

The key differences between positive and normative economics are given below:

Table 1.3.1 Key Differences between Positive and Normative Economics

Positive Economics	Normative Economics
Focuses on 'what is'	Focuses on 'what should be'
It is objective	It is subjective
It describes economic phenomena	It prescribes what should be done
Focuses on understanding economic phenomena	Focuses on evaluating and prescribing economic policies and outcomes
Relies upon empirically verifiable statements about economic conditions	It includes value-based assertions.
Testable positive statements help to explain and predict world events	Normative statements cannot be tested by facts because they are about what ought to be the case

1.3.2 Static, Comparative, and Dynamic Analysis

Statics and Dynamics are two general methods employed in the construction and study of economic models.

1.3.2.1 Statics

In economics, statics refers to the study of economic phenomena at a particular point in time, without considering changes over time. In other words, the branch of economic analysis that confines its attention to the equilibrium position is called statics. It is not able to explain the process of change in a model. It can explain why there is disequilibrium, what relationships among the variables are necessary for equilibrium, and in what direction the system will move next. Statics help us to understand the effects of different policies on economic outcomes. The importance of statics is given below:

- Static analysis is used in the explanation of the stationary state. A stationary state economy or steady state economy is defined as a state of full employment.
- It is only through the method of economics statics that the various types of allocative problems of the economy are studied.
- It is useful in the analysis of each part of an economy before it moves to the path of economic development.

1.3.2.2 Dynamics

According to W.J. Baumol, economic dynamics is the study of economic phenomena concerning preceding and succeeding events. The dynamic method of analysis applies to models in disequilibrium and with change. Sometimes dynamics is considered the study of the movement of economic variables from one equilibrium position to another. It can trace the changes in the variables period by period, leading to the equilibrium position. The cobweb theorem is an important development in the field of dynamics that helps to explain the price of agricultural commodities. Economic dynamics is more realistic than economic statics. The importance of dynamics is given below:

- Dynamics helps policymakers evaluate the effects of different policy interventions on economic outcomes over time.
- Dynamics helps us understand the factors that drive economic growth and development.
- Dynamics helps us forecast future economic trends and patterns.
- Dynamics allows us to anticipate and prepare for potential economic shocks.

The diagrammatic representation of dynamics is given in Figure 1.3.1. In the Figure 1.3.1, the initial demand conditions in the first period are given by the demand curve DD. The intersection of the demand and supply curves at point E gives the equilibrium price OP and equilibrium quantity OQ. Based on the ruling price, producers plan a total output of Q for the next period. If we assume that the demand curve moves to the left as a result of the decrease in income, the producers are faced with the new demand curve DD_1. The producers can sell the whole of their output only at the reduced price P_1. Under the new demand conditions, there will be an excess supply equal to Q_1Q. In the

next period, producers are prepared to produce only a total output of Q_1. But the curve DD_1 means that output level Q_1 will fetch a price of P_2, which will, in turn, induce the producers to produce a larger quantity Q_2 in the following period. This process will go on until the stable equilibrium E_1 is reached with price P_0 and quantity Q_0.

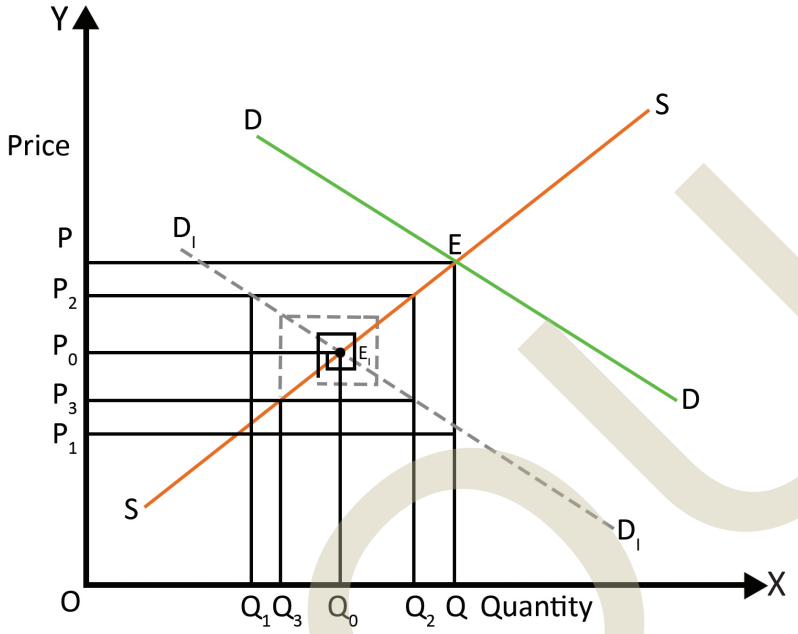

Fig 1.3.1 Dynamics

The differences between statics and dynamics are given below:

Table 1.3.2 Differences between Statics and Dynamics

Statics	Dynamics
Variables in the static model relate to the same period	Variables in a dynamic model are dated
It cannot explain the process of change in a model because it ignores the passage of time	It can explain the process of change
It applies to models in equilibrium	It applies to models in disequilibrium
It is an analysis of the present economic situation only	It is an analysis of the link between the past and the present

1.3.2.3 Comparative Statics

The most useful variety of statics is comparative statics. It compares two or more equilibrium positions and examines how a change in one or more variables affects the equilibrium outcome of an economic system. Comparative statics assume that all other

variables remain constant. For example, a comparative statics analysis of taxation might examine how a change in tax rates affects the equilibrium price and quantity of a good. In this analysis, we start with a position of equilibrium, then introduce a change and study the ultimate effect of the change. In comparative static analysis, we ignore the path involved in moving from the old equilibrium to the new one. The diagrammatic representation of the comparative statics is given in Figure 1.3.2.

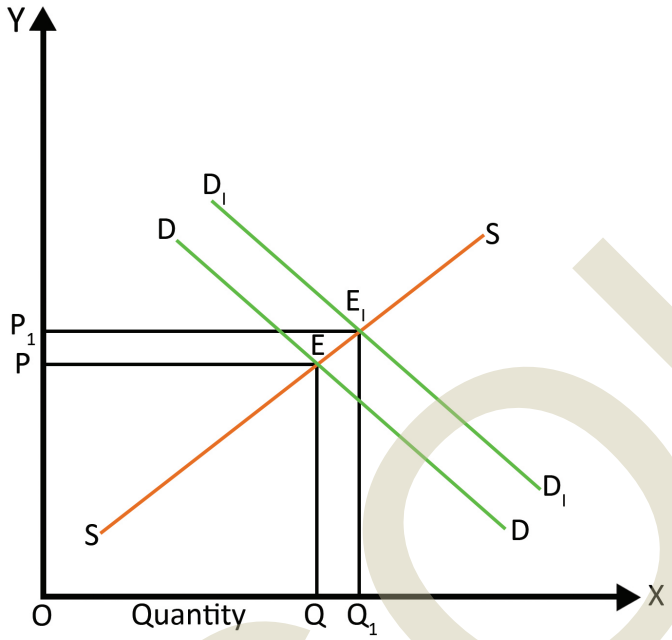

Fig 1.3.2 Comparative Statics

The original equilibrium position is determined by the intersection of the supply curve SS and the demand curve DD. Suppose the changes in demand conditions cause the demand curve to shift DD_1. The change will raise the equilibrium position from E to E_1, the equilibrium price from OP to OP_1, and the equilibrium quantity from OQ to OQ_1. Comparative statics compares the equilibrium positions E and E_1. The advantages and disadvantages of comparative statics are given below.

Table 1.3.3 Advantages and Disadvantages of Comparative Statics

Advantages	Disadvantages
It simplifies complex economic systems by examining the effects of a single change.	It assumes that all other variables remain constant, which may not always be realistic.
It provides insights into the economic mechanisms that drive changes in equilibrium outcomes.	It ignores the dynamic adjustments that occur over time.

It helps in policy analysis by examining the effects of policy changes on equilibrium outcomes.	It is typically limited to analysing small changes in exogenous variables.

1.3.3 Short Run and Long Run Analysis

The two main periods used in economics are the short run and the long run. We can add two other periods - the very short run and the very long run for a broad understanding of time periods in economics. The very short run or market period refers to the periods in which the supply of the commodity is completely fixed. Each firm has a fixed stock of commodities on the one hand, and the total stock in the market is also fixed. The very short run period might be relevant when analysing how financial markets respond to news events, such as interest rate changes or economic indicators. The short run is a period in which some factors of production, such as plant size or technology, are fixed and cannot be changed. Other inputs, such as labour or raw materials, can be varied where firms and individuals respond to changes in market conditions. The short run exists when producers can increase output by employing more variable factors while other 'fixed' factors cannot be increased. For example, a footwear manufacturer may be able to increase production and output by employing more workers or by using more raw materials. Output in the short run can also increase by getting existing workers to work longer hours. However, some factors remain fixed, such as the machines used to assemble the footwear or the premises where the footwear is manufactured.

The long run is a period in which all factors of production, such as plant size or technology, and institutional arrangements, can be changed. The long run is a period of full adjustment, where firms and individuals have fully responded to changes in market conditions and invest in new technologies and capital. A firm might analyse its decision to enter or exit a market in the long run, considering the potential for changes in market conditions or institutional arrangements. The long run begins when all factors of production can be increased. For example, for the footwear manufacturer, the long run is entered when every factor is increased, including workers, raw materials, machinery, plant, and premises. However, in the long run, the underlying technology that is used in production does not change.

The very long run is a period in which significant structural changes in the economy, such as changes in institutions, technology, and demographics. For example, for the footwear manufacturer, new computerised production and distribution methods can be introduced that transform how products are made. The Industrial Revolution is an example of a very long-run phenomenon, as it involved significant structural changes in the economy and fundamental transformations in technology and industry. The key differences between the periods in economics are given in Table 1.3.4.

Table 1.3.4 Key Differences Between the Periods in Economics

Very shortrun	Shortrun	Longrun	Very longrun
• One day-Supply of the commodity fixed	• One day to six months-some inputs can be fixed	• Greater than six months-All inputs are variable	• Over several years-Structural changes in the economy

1.3.4 Partial and General Equilibrium Analysis

In economics, partial and general equilibrium analysis are the two distinct approaches used to study economic phenomena.

The partial equilibrium analysis is associated with the name of Alfred Marshall. In this type of analysis, only part of the system is observed. This theory assumes that individual sectors of the economy are not related to other sectors of the economy. It disregards interrelationships, and it is used in microeconomics. Partial equilibrium analysis is based on the assumption of *ceteris paribus*. The term ceteris paribus means other things remaining constant. In short, partial equilibrium analysis examines the equilibrium of a single market or a small group of markets, assuming that all other markets remain unchanged. Demand and supply analysis is an example of partial equilibrium analysis.

The general equilibrium analysis is associated with the name of Leon Walras. It is concerned with the economic system as a whole. This theory takes into account the inter-relationship of prices and outputs in different markets, and it is used in macroeconomics. General equilibrium analysis helps to understand the interdependence of the various sectors of the economy. In short, general equilibrium analysis examines the equilibrium of all markets in an economy simultaneously, taking into account the interactions between markets. The discovery of oil deposits in a small country, which increases citizens' income and affects all markets simultaneously, is an example of general equilibrium analysis.

The key differences between the partial and general equilibrium are given in Table 1.3.5

Table 1.3.5: Key Differences Between the Partial and General Equilibrium

Partial Equilibrium Analysis	General Equilibrium Analysis
It focuses on a single market	It examines all markets simultaneously
It assumes that all other markets remain unchanged	It recognises the interdependence between markets
It is used in microeconomics	It is used in macroeconomics
Study the equilibrium of the individual entity	Study the equilibrium of the entire economy

Recap

- Positive economics is concerned with 'what is'
- Normative economics is concerned with 'what ought to be'
- Comparative statics compares two or more equilibrium positions
- The short run is a period in which some factors of production, such as plant size or technology, are fixed and cannot be changed
- The long run is a period in which all factors of production, such as plant size or technology, and institutional arrangements, can be changed
- The partial equilibrium analysis is associated with the name of Alfred Marshall
- The general equilibrium analysis is associated with the name of Leon Walras

Objective Questions

1. What is positive economics?
2. What is normative economics?
3. What is statics?
4. Write down the meaning of comparative statics.
5. State the meaning of *Ceteris Paribus*.
6. Give an example for long-run economic analysis.
7. Whose name is associated with partial equilibrium analysis?
8. Which branch of economics is concerned with general equilibrium analysis?

Answers

1. Positive economics is concerned with what is
2. Normative economics is concerned with what ought to be
3. The branch of economic analysis that confines its attention to equilibrium positions is called statics
4. It compares two or more equilibrium positions
5. *Ceteris Paribus* means other things remaining constant
6. Study of the equilibrium of all markets in the economy
7. Alfred Marshall
8. Macroeconomics

Assignments

1. Compare positive and normative analysis.
2. Bring out the difference between statics, dynamics and comparative statics.
3. Explain short-run and long-run economic analysis.
4. Compare partial and general equilibrium analysis.

Reference

1. Pindyck, R.S., Rubinfeld, D. L., & Mehta, P. L. (2013). *Microeconomics* (Seventh edition), Pearson Education, Prentice Hall.
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Suggested Reading

1. A. Koutsyannis-*Modern Microeconomic Analysis* (1975,1979, Macmillan Education UK)
2. Snyder, Christopher and Walter, Nicholson (2017). *Microeconomic Theory-Basic Principles and Extensions*, Cengage Learning.

BLOCK
02

Micro Economic and Macro Economic Concepts

Unit 1

Micro Economic Concepts

Learning Outcomes

After completing this unit, the learner will be able to:

- understand the concepts of demand and supply
- differentiate between expansion and contraction of demand and supply
- identify the main determinants that influence demand and supply in a market
- know the concept of elasticity of demand and supply

Prerequisites

To begin learning about microeconomic concepts, consider a local market where buyers come searching for fresh fruits and sellers decide how much to bring and at what price. Behind these everyday exchanges are important economic ideas such as scarcity, choice, and opportunity cost, because both buyers and sellers face limited resources and must make decisions. Learners should be familiar with these basic concepts and how they appear in real life. For example, understanding how an increase in apple prices might lead a buyer to choose oranges instead, or how sellers adjust their supply based on demand, helps make the ideas more concrete. Basic numerical skills - such as interpreting graphs, working with functions, and calculating percentages - also support learning.

To effectively learn microeconomic concepts, students should have a foundational understanding of basic economic ideas such as scarcity, choice, opportunity cost, and the role of consumers and producers in an economy. Familiarity with real-life examples of buying and selling, as well as basic numerical skills including working with functions, graphs, and percentages, will support comprehension. A basic understanding of how prices influence consumer and seller behaviour in everyday markets is also beneficial.

Keywords

Scarcity, Opportunity Cost, Demand and Supply, Elasticity

Discussion

2.1.1 Demand and Supply

A market is a system or network that facilitates the exchange of goods, services, or resources between buyers and sellers. It does not necessarily have to be a physical location where people meet face to face; rather, a market exists as long as there is communication or interaction between buyers and sellers that allows them to agree on a price and complete a transaction. Markets can take different forms based on their scope, local markets regional markets, national markets and international markets regardless of their size or location. Markets play a central role in the economy by determining the prices and quantities of goods and services. They provide the framework for the interaction of demand and supply, which in turn helps in the efficient allocation of resources in the economy.

In economics, demand refers to the quantity of a good or service that consumers are willing and able to purchase at various prices over a specific period of time. It is essential to note that demand is more than just a desire for a product, it must also be supported by the ability to pay. Demand curve is usually represented as a schedule or a curve, which shows how the quantity demanded changes at different price levels. Typically, there is an inverse relationship between price and quantity demanded: as the price decreases, the quantity demanded increases, and as the price increases, the quantity demanded decreases. Understanding demand is crucial because it helps businesses and policymakers analyse consumer behaviour, set appropriate pricing strategies, plan production levels, and make forecasts about future market trends.

Supply refers to the quantity of a good or service that sellers are willing and able to offer for sale at various prices over a specific period of time. Like demand, supply is not limited to a single quantity at one price - it is a schedule or curve that shows different quantities that producers are willing to sell at various price levels. Supply typically has a positive relationship with price: as the price increases, the quantity supplied increases, because higher prices make production more profitable. Conversely, lower prices may discourage producers from supplying the good. Supply is influenced by several factors, including production costs, technology, number of sellers, input prices, and government policies. Understanding the nature of supply is important for firms and economists because it helps determine how much of a product will be available in the market. It also guides

decisions about how much to produce, what price to set, and how to manage inventory and resources efficiently.

2.1.2 Demand Function

The demand for a commodity is influenced by several factors. An individual's demand depends on the price of the commodity, their income, the prices of related goods, tastes and preferences, advertising by producers, and future expectations. This relationship can be expressed using a general demand function:

$$Q_d^x = f(P_x, I, P_r, T, A, E)$$

Where $Q^x d$ = Quantity demanded of commodity *x*, Px = Price of commodity *x*, I = Income of the consumer, Pr = Price of related goods (substitutes and complements), T = Tastes and preferences, A = Advertisement expenditure, E = Expectations about future prices or income.

This demand function simply shows that the quantity demanded (on the left-hand side) is influenced by the various factors listed (on the right-hand side).

However, for simplicity and analytical purposes, economists often focus on the relationship between the quantity demanded and the price of the commodity alone, keeping all other factors constant (ceteris paribus). In that case, the demand function becomes:

$$Q_d^x = f(P_x)$$

This simplified function means that the quantity demanded of commodity *x* depends only on its own price, assuming no changes in other influencing factors.

2.1.2.1 Law of Demand

The Law of demand was formally introduced by Alfred Marshall, a well-known British economist, in his book *Principles of Economics* (1890). It explains the inverse relationship between the price of a good and the quantity demanded. That is, when the price of a good falls, the quantity demanded increases, and when the price rises, the quantity demanded decreases, other things being equal (ceteris paribus). For example: Suppose the price of apples falls from ₹100 per kg to ₹80 per kg. In that case, people are likely to buy more apples because they are now cheaper. n short, there is an inverse relationship between price and quantity demanded, assuming all other factors remain unchanged.The factors assumed to remain constant include:

- Consumer's tastes and preferences
- Income of the consumer
- Prices of related goods (substitutes and complements), etc.

The Law of Demand can be explained with the help of a demand schedule and a corresponding demand curve.

Table 2.1.1 Demand Schedule

Price of the Commodity (₹)	Quantity Demanded (Units)
100	10
80	20
60	30
40	40
20	50

This schedule clearly shows that as the price decreases, the quantity demanded increases, which supports the inverse relationship stated in the Law of Demand. Let us convert this demand schedule into a demand curve by plotting the different price and quantity combinations on a graph, we get a downword sloping demand curve, as shown below.

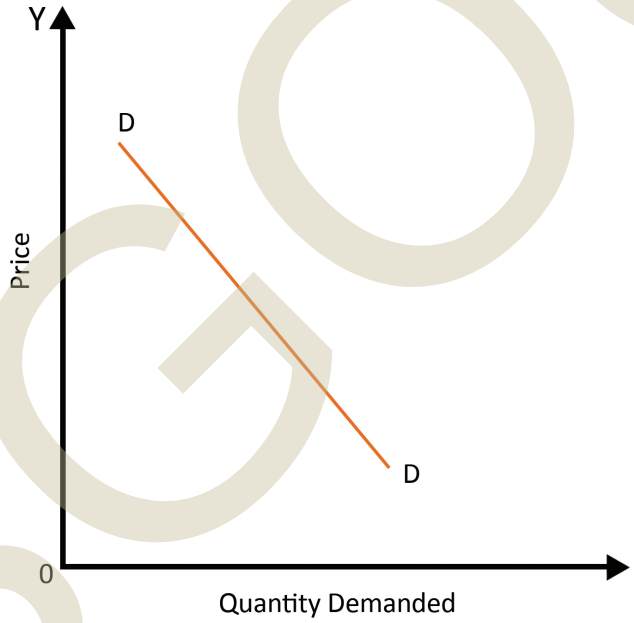

Fig 2.1.1 Demand Curve

The vertical axis shows the price, and the horizontal axis shows the quantity demanded. According to the Law of Demand, people buy more goods at lower prices and fewer goods at higher prices. As a result, the demand curve slopes downward from left to right, as shown in the figure above. Each point on the demand curve represents a different price-quantity combination, reflecting the inverse relationship between price and quantity demanded.

2.1.2.2 Reasons for the Law of Demand

The Law of Demand states that there is an inverse relationship between the price of a good and the quantity demanded. This relationship can be explained through the

following effects:

1. **Income Effect:** When the price of a good falls, consumers are able to buy more with the same income, which means their purchasing power increases. This increase in real income encourages them to demand more of the good. Conversely, when the price rises, their real income falls, leading to a decrease in quantity demanded. This effect contributes to the downward-sloping demand curve.

2. **Substitution Effect:** When the price of a good falls, it becomes cheaper compared to other substitute goods. As a result, consumers tend to substitute this good in place of the relatively more expensive ones. This increases the quantity demanded of the cheaper good, supporting the inverse price-demand relationship.

3. **Market Size Effect:** At higher prices, only a limited number of consumers can afford the good. But when the price falls, the good becomes affordable to more people, increasing the number of buyers in the market. This expansion in market size leads to higher total demand, further reinforcing the downward slope of the demand curve.

2.1.2.3 Extension and Contraction of Demand

When the quantity demanded of a good change due to a change in its price, while all other factors remain constant, it is referred to as extension or contraction of demand. If the price of the good falls and, as a result, the quantity demanded increases, it is known as an extension of demand. Conversely, if the price rises and the quantity demanded decreases, it is called a contraction of demand. These changes are caused solely by changes in the price of the good, assuming that other factors such as income, tastes, and the prices of related goods remain unchanged. Extension and contraction of demand are represented by movements along the same demand curve extension is shown as a downward movement, while contraction is shown as an upward movement along the curve.

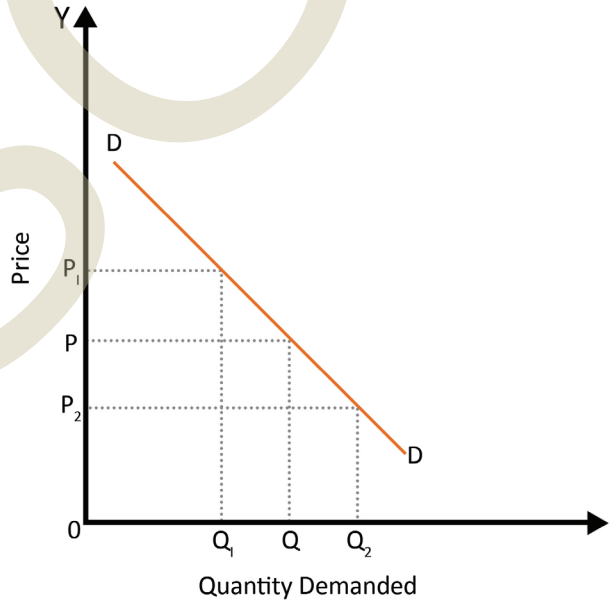

Fig 2.1.2 Extension and Contraction of Demand curve

The price of a good is OP is shown on the Y axis and , the quantity demanded is OQ is shown on the X axis. If the price falls to OP_2, the quantity demanded increases to OQ_2, showing an extension in demand by the amount QQ_2. On the other hand, if the price rises from OP to OP_1, the quantity demanded decreases to OQ_1, showing a contraction in demand by the amount QQ_1. These changes happen along the same demand curve, and are known as changes in quantity demanded. A movement downward along the demand curve (from a higher price to a lower price) indicates an increase in quantity demanded or extension in demand. A movement upward along the curve (from a lower price to a higher price) indicates a decrease in quantity demanded or contraction in demand.

2.1.2.4 Shifts in Demand- Increase and Decrease in Demand

A change in demand occurs when factors other than the price of the good itself such as consumer income, tastes, or the prices of related goods - change. These are known as non-price determinants of demand. When these factors change, the entire demand curve shifts to a new position. Only changes in non-price factors can shift the entire demand curve. These factors are known as 'demand shifters' or 'shift factors'.

If the demand curve shifts to the right, it indicates an increase in demand. This means that consumers are now willing to buy more of the good at every price level than before. The following reasons may cause an increase in demand are

- An increase in consumers' income.
- A rise in the prices of substitute goods.
- A fall in the prices of complementary goods.
- A change in consumer preferences in favour of the good.
- An increase in the number of buyers in the market.
- Redistribution of income in favour of people with higher spending tendencies. The increase in demand can be explain with the help of figure.

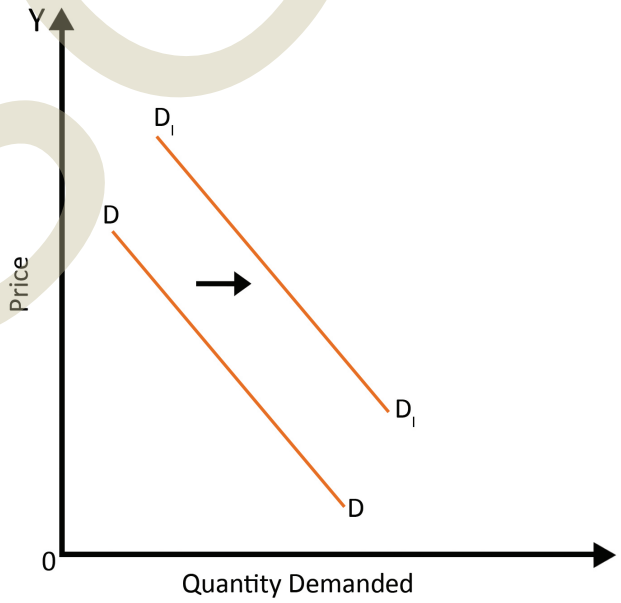

Fig 2.1.3 Increase in Demand curve

In a figure, this is shown by a shift from the original demand curve (DD) to a new curve positioned to the right (D_1D_1). This denotes the increase in demand curve.

On the other hand, if the demand curve shifts to the left, it indicates a decrease in demand. This means that consumers are now willing to buy less of the good at each price level. A decrease in demand can happen due to the following factors:

- A decrease in consumers' income.
- A fall in the price of substitute goods.
- A rise in the price of complementary goods.
- A change in consumer preferences away from the good.
- A decrease in the number of buyers.
- Redistribution of income favouring people who tend to save more and spend less. Let us explain with the help of figure:

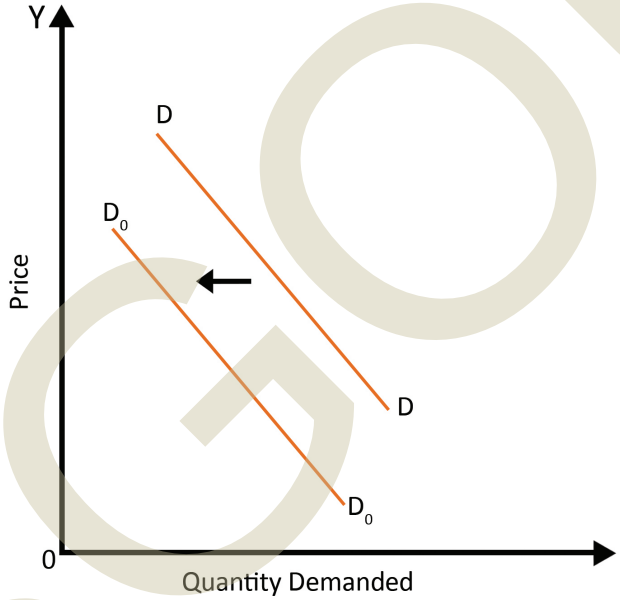

Fig 2.1.4 Decrease in Demand curve

In a figure, this is shown as a shift from the original demand curve (DD) to a new one positioned to the left (D_0D_0). This shows the decrease in demand curve.

2.1.2.5 Determinants of Demand

The demand for a product is not influenced by price alone. Various other factors - known as non-price determinants of demand, can also affect how much of a good is demanded. While drawing a demand curve, these factors are assumed to remain constant. However, any change in them can shift the entire demand curve. The main determinants of demand are discussed below:

1. **Income of the Consumer**: The level of income greatly influences demand. When people's income increases, they tend to buy more goods and services, leading to

higher demand. Such goods are called normal goods, where demand increases with income. However, for inferior goods, demand falls as income rises because consumers switch to better alternatives.

2. **Prices of Related Goods**: Goods can be substitutes or complements.

- **Substitute Goods** are those that can replace each other, like tea and coffee. If the price of coffee increases, people may buy more tea, increasing its demand.
- **ComplementaryGoods** are used together, like a car and petrol. If the price of cars falls, more cars are bought, which increases the demand for petrol too.

3. **Tastes and Preferences:** Consumer preferences significantly affect demand. Products that are fashionable or heavily advertised tend to see a rise in demand. If a product goes out of fashion or people lose interest, its demand declines.

4. **Expectations about the Future:** If consumers expect prices to rise in the future, they may buy more now to avoid paying higher prices later. Similarly, if they expect a fall in prices or a decrease in income, they may reduce their current purchases.

5. **Number of Buyers in the Market:** The size of the market matters. An increase in the number of buyers, such as through population growth, raises the overall market demand for a commodity.

6. **Distribution of Income:** How income is distributed in society also affects demand. A more equal distribution leads to higher overall demand, as people with lower income generally have a higher tendency to consume. In contrast, greater inequality tends to reduce aggregate demand since the rich spend a smaller proportion of their income.

2.1.3 Supply

Supply refers to the various quantities of a good or service that sellers are willing and able to offer for sale at different prices over a given period of time. As a general rule, the higher the price, the greater the quantity that sellers are willing to supply. This is because higher prices usually lead to higher potential profits. Importantly, supply reflects how much sellers intend to sell at different price levels, not necessarily what is actually sold. Like demand, the quantity of a good supplied is not determined by price alone. Other important factors include:

- The price of the good itself
- The prices of related goods
- The cost of inputs (such as raw materials and labour)
- The level of technology
- Expectations about future prices
- The number of producers in the market.

Therefore, the supply function can be expressed as:

Where: $Q_X^S = f(P_x, P_r, P_i, T, E, N)$

Q_X: Quantity supplied of good X, P_X: Price of the good X, P_R: Prices of related goods, P_I: Prices of inputs, T: State of technology, E: Expectations, N: Number of producers in the market.

2.1.3.1 Supply Schedule and Supply Curve

A supply schedule is a table that shows how much of a good or service sellers are willing to supply at different prices over a specific period of time.

Table 2.1.2 Supply Schedule

Price (₹)	Quantity Supplied (units)
5	40
10	60
15	80
20	100
25	120

This table clearly shows that as the price rises, the quantity supplied also increases. Based on this schedule, when we draw a supply curve. The supply curve slopes upward from left to right, showing that sellers are willing to supply more units at higher prices. Let us now draw the supply curve using the information from the schedule.

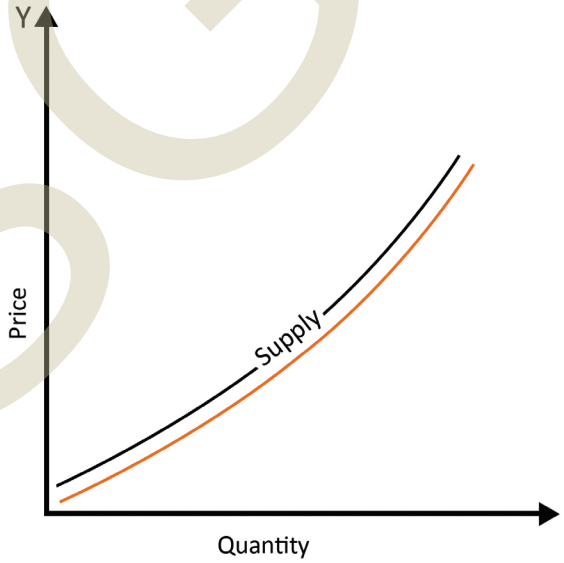

Fig 2.1.5 Supply Curve

2.1.3.2 Determinants of Supply

The quantity of a good or service that sellers are willing and able to supply depends

mainly on its own price, but there are also several non-price factors that can influence supply. Let us look at each of the factor in detail:

1. **Prices of Related Products:** Goods can be either substitutes or complements in production:

- Substitutes in production are goods that can be produced in place of one another using the same resources. For example, a farmer can choose to grow either rice or vegetables on the same land. If the price of vegetables rises, the farmer may shift resources away from rice to grow more vegetables, thus reducing the supply of rice.
- Complements in production (also called joint products) are goods that are produced together. For instance, producing sugar also results in molasses; processing beef also yields hides. If the price of a complement falls, the production of the related good may also decline, leading to a decrease in its supply.

2. **Prices of Inputs:** Inputs like labour, raw materials, and machinery are essential for production. If the prices of these inputs increase, the cost of production rises, making it less profitable for firms to produce the good. This results in a decrease in supply. Conversely, if input prices fall, production becomes cheaper and supply increases.

3. **Technology:** Advancements in technology can make production more efficient by lowering costs. Improved technology generally increases supply because it allows firms to produce more output at the same or lower cost, thus increasing profitability.

4. **Expectations:** Producer expectations about future prices can also influence current supply. If producers expect higher prices in the future, they may either increase production now to prepare for future demand or hold back current supply to sell later at higher prices. On the other hand, if they expect prices to fall, they may increase current supply to avoid future losses. Thus, the effect of expectations on supply can vary depending on how producers choose to respond**.**

5. **Number of Producers:** The total market supply is the sum of supplies from all individual sellers. Therefore, if the number of producers increases, the market supply will also increase. Conversely, if some sellers exit the market, the overall supply will decrease.

2.1.3.3 Law of Supply

The law of supply is a fundamental principle of economic theory which states that all other things are equal, an increase in price results in an increase in quantity supplied. As the price increases, the quantity supplied also increases, and conversely, as the price decreases, the quantity supplied decreases, assuming all other factors remain constant. This fundamental principle highlights the positive correlation between price and supply, where higher prices incentivise suppliers to produce more, while lower prices lead to reduced production.

2.1.3.4 Expansion and Contraction of Supply

Expansion and contraction of supply refer to changes in the quantity supplied that occur due to a change in the price of the product, while all other factors remain constant.

These changes are represented as movements along the same supply curve.

- **Expansion of Supply**: This occurs when the price of the good increases, leading to a higher quantity being supplied. Producers are willing to supply more because they can earn greater profits at higher prices. This is shown as an upward movement along the supply curve.
- **Contraction of Supply**: This happens when the price of the good decreases, resulting in a lower quantity supplied. At lower prices, producers may reduce output due to lower profitability. This is shown as a downward movement along the supply curve.

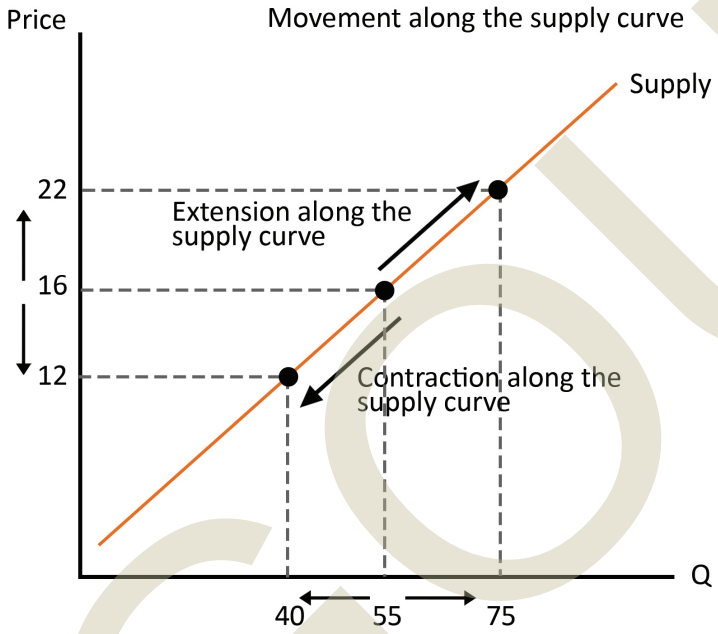

Fig 2.1.6 Expansion and Contraction of Supply Curve

The diagram illustrates the concept of movement along the supply curve, specifically showing the extension (or expansion) of supply and contraction of supply. These movements occur solely due to a change in the price of the good, while all other factors that could affect supply are held constant (ceteris paribus).

2.1.3.5 Shift in Supply Curve

In microeconomics, the supply curve represents the relationship between the price of a good or service and the quantity producers are willing to supply. While a change in the price of the good causes a movement along the supply curve, a shift in the supply curve occurs when factors other than the price influence the quantity supplied. A shift reflects a change in the overall supply at every possible price level.

There are two types of shifts in the supply curve:

1. **Rightward Shift (Increase in Supply):** This occurs when producers are willing and able to supply more of a good at every price level. Factors such as improved technology, reduction in input costs, or favourable government policies can cause this shift.

2. **Leftward Shift (Decrease in Supply):** This occurs when producers are willing to supply less of a good at every price level. Factors such as higher production costs, natural disasters, or increased taxes can lead to this shift.

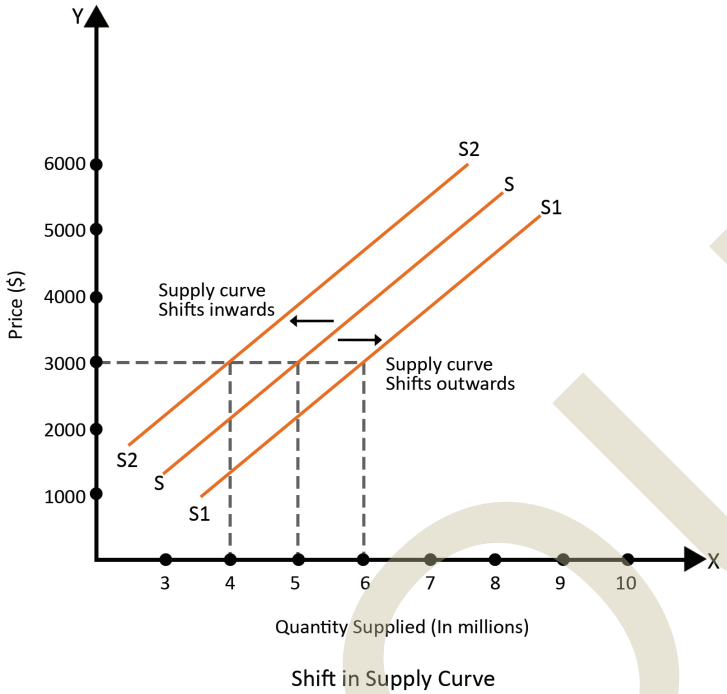

Fig 2.1.7 Shift in Supply Curve

In the figure, the supply curve shifts from SS-to-SS_1, which represents an outward shift, indicating an increase in supply. The shift from SS-to-SS_2 represents an inward shift, indicating a decrease in supply.

2.1.4 Elasticity of Demand and Supply

Elasticity is a quantitative measure that assesses the responsiveness or sensitivity of one variable to changes in another variable. It measures the magnitude and direction of changes in demand or supply in response to changes in factors such as price, income, or prices of related goods. The elasticity of demand and supply can be studied in detail.

2.1.4.1 Price Elasticity of Demand

The elasticity of demand measures the degree to which the quantity demanded of a good respond to changes in its price, consumer income, or the prices of related goods. It assesses how sensitive buyers are to these changes, indicating whether a small change in one of these factors will lead to a relatively large or small change in the quantity demanded. This degree of responsiveness, known as the degree of elasticity. The degree of responsiveness of quantity demanded, price elasticity of demand is classified into five categories.

1. **Perfectly Inelastic Demand:** When the quantity demanded does not change as a result of the change in price, demand is said to be perfectly inelastic. Example: Buying vegetables at a market where multiple vendors sell the same produce. If

one vendor increases the price, you can easily buy from another vendor. The numerical value of elasticity will be zero ($\eta = 0$).

2. **Inelastic Demand:** Quantity demanded changes by a smaller percentage than the change in price. Example: Buying medicine for a chronic condition. Even if prices increase, you'll likely still buy the medication. The coefficient of elasticity will be less than one but greater than zero ($0< \eta<1$).

3. **Unitary Elastic Demand:** If a certain percentage change in price leads to an equal percentage change in quantity demanded, then demand is said to have unitary elasticity. For e.g., If a 10% increase in the price of coffee leads to a 10% decrease in the amount of coffee you buy. The coefficient of elasticity will be equal to one ($\eta=1$).

4. **Elastic Demand:** When the percentage change in quantity demanded exceeds the percentage change in price, the demand is said to be elastic. For example, if the price of a vacation package increases, people can easily choose to: Postpone their trip, choose a different destination, or opt for a cheaper alternative. The value of the coefficient of elasticity will be greater than one but less than infinity ($1<\eta<\infty$).

5. **Perfectly Elastic Demand:** If a small change in price leads to an infinitely large change in quantity demanded, we can say that demand is perfectly elastic. Example:Suppose a shop sells bottled water at a fixed prize of Rs.10 per bottle. If the price increases even slightly to Rs.10.10, consumers will stop buying from this shop and to another store that still sells it for s.10. This means, the slightest rise in price causes demand to fall to zero. The coefficient of elasticity will be infinity ($\eta =\infty$).

2.1.4.2 Price Elasticity of Supply

Price elasticity of supply measures the responsiveness or sensitivity of the quantity supplied of a commodity to a change in its price. It is calculated as the percentage change in the quantity supplied divided by the percentage change in price. Letting **ε** (Greek letter epsilon) represent the coefficient of price elasticity of supply, the formula is:

$$\varepsilon = \frac{\text{(Percentage change in quantity supplied)}}{\text{(Percentage change in price).}}$$

The degree of elasticity of supply can be classified into five types. These types are explained in detail below.

1. **Perfectly Elastic Supply ($\varepsilon = \infty$):** In this case, even a very small change in price leads to an infinite change in the quantity supplied. Producers are willing to supply any quantity at a specific price, but nothing at a lower price. The supply curve is a horizontal straight line.

2. **Perfectly Inelastic Supply ($\varepsilon = 0$):** Here, the quantity supplied remains constant regardless of any change in price. Suppliers are unable or unwilling to change the quantity supplied, even if the price increases or decreases. The supply curve is a vertical line.

3. **Relatively Elastic Supply ($\varepsilon > 1$):** When the percentage change in quantity supplied is greater than the percentage change in price, supply is said to be relatively elastic.

This means suppliers are highly responsive to changes in price. A small rise in price results in a large increase in supply.

4. **Relatively Inelastic Supply ($\varepsilon < 1$):** In this case, the percentage change in quantity supplied is less than the percentage change in price. This indicates that suppliers are not very responsive to price changes. Even with a significant price change, the increase or decrease in supply is limited.

5. **Unitary Elastic Supply ($\varepsilon = 1$):** When the percentage change in quantity supplied is exactly equal to the percentage change in price, supply is said to be unitary elastic. For example, if the price increases by 10%, the quantity supplied also increases by 10%. The responsiveness is proportional.

Recap

- Demand is the desire to buy a product supported by the ability and willingness to pay
- Supply refers to a producer's willingness and ability to sell a product at various prices
- Individual demand and supply relate to one consumer or producer, while market demand and supply refer to all buyers or sellers
- The Law of Demand states that quantity demanded increases as price decreases, all else equal
- The Law of Supply states that quantity supplied increases as price rises, assuming other factors remain constant
- Shifts in demand occur due to changes in income, preferences, or the prices of related goods, not price alone
- A demand schedule is a table showing the quantity demanded at various price points
- The demand curve slopes downward from left to right, showing the inverse price-demand relationship
- Expansion of demand occurs when a fall in price leads to a higher quantity demanded
- Contraction of demand happens when a rise in price leads to a lower quantity demanded
- Expansion and contraction reflect movements along the demand curve, not shifts in demand
- A shift in the demand curve occurs due to non-price factors, moving the whole curve rightward or leftward

Objective Questions

1. What term refers to the relationship between price and quantity demanded?
2. Which law states that quantity supplied increases as price increases?
3. What is the term for a graphical representation of the demand schedule?
4. What type of shift occurs when demand increases at every price level?
5. What term is used for a reduction in supply due to an increase in production costs?
6. What is the term for the function that shows how quantity supplied depends on various factors?
7. What do we call the factor that increases supply due to lower production costs from technological advancements?
8. What term describes a situation where the quantity demanded does not change despite a price change?
9. What term refers to the responsiveness of quantity supplied to price changes?

Answers

1. Demand
2. Law of Supply
3. Demand curve
4. Rightward
5. Contraction
6. Supply Function
7. Technology
8. Perfectly Inelastic
9. Elasticity

Assignments

1. What is the law of demand? Explain with the help of a diagram.
2. What are the main differences between expansion/contraction and shift in the demand curve?
3. What are the determinants of supply? Explain any four.
4. Define the elasticity of demand and supply.
5. Write a short note on the supply function and how it relates to the law of supply.

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Unit 2

Macroeconomic Concepts

Learning Outcomes

After completing this unit, the learner will be able to:

- identify key macroeconomic variables
- understand their role in the functioning of an economy
- understand the concept of general equilibrium
- discuss the instruments of macroeconomic policy
- know the concept of unemployment and poverty

Prerequisites

Before beginning the study of macroeconomic concepts, students should have a foundational understanding of basic economic principles. This includes familiarity with the laws of demand and supply, the concept of market equilibrium, and the role of prices in allocating resources. An understanding of microeconomic concepts will help in distinguishing between individual economic behaviour and the broader economy-wide trends studied in macroeconomics.

Students should also be able to interpret basic data, graphs, and charts, as macroeconomics often involves analysing national income statistics, inflation trends, and employment data. A basic knowledge of mathematical operations, percentages, and algebra is beneficial for working with macroeconomic models and understanding relationships between different economic variables.

Familiarity with economic terms such as Gross Domestic Product (GDP), inflation, fiscal policy, monetary policy, unemployment, and poverty will provide a smoother learning curve. An interest in current economic issues, such as economic growth,

price stability, and global financial trends, will further enrich learning.

Additionally, students should develop critical thinking and problem-solving abilities, as macroeconomics requires the application of theoretical models to real-world scenarios. A basic understanding of how governments and central banks operate within an economy will also be helpful when studying macroeconomic goals and instruments.

Keywords

Stock Variables, Flow Variables, Exogenous Variables, Endogenous Variables, Edgeworth Box, Inflation, Unemployment, Poverty

Discussion

2.2.1 Macroeconomic Variables

Macroeconomic variables are key indicators used to measure the overall performance of an economy. These variables help in understanding the economic conditions and are crucial for policymakers, businesses, and economists in analysing trends and formulating strategies.

One important distinction in macroeconomics is between stock and flow variables. Stock variables refer to quantities measured at a particular point in time, such as the capital stock, national wealth, or the money supply. These variables do not change over time unless influenced by certain factors, like investment or depreciation. On the other hand, flow variables are measured over a period of time. Examples include national income, government spending, and exports, which are tracked for specific time intervals (e.g., yearly or quarterly).

Exogenous and endogenous variables are also significant in understanding economic behaviour. Exogenous variables are those whose values are determined outside the model and are typically not influenced by the economy's behaviour. They are inputs to the economic system, such as government policies, foreign events, or natural resources. Endogenous variables are those determined within the economic model, such as output, unemployment rate, and inflation, which are directly affected by other economic factors.

General equilibrium theory and the Edgeworth Box are essential for understanding how economies balance out. The Edgeworth Box illustrates how two individuals or

agents with different preferences and initial endowments can reach an optimal allocation of resources, where no one can improve without making the other worse off.

Macroeconomic variables like inflation, unemployment, and poverty are fundamental in determining the health of an economy. Inflation measures the rate of price increase, unemployment gauges labour market health, and poverty reflects income inequality and socio-economic disparity. All these variables are interconnected and critical for assessing the state of the economy.

2.2.2 Stock and Flow Variables

In economics and other fields, variables that describe quantities can be categorised as either stock variables or flow variables, depending on their measurement. Stock variables are measured at a specific point in time, representing a snapshot of a quantity, such as the total amount of money in a bank account or the number of people employed. In contrast, flow variables are measured over a period of time, representing a rate or speed of change, such as the amount of money deposited into a bank account over a month or the number of new jobs created in a quarter. Understanding the distinction between stock and flow variables is crucial for accurately analysing economic and other systems, as it allows for a clear understanding of the dynamics of change and the relationships between different variables. By recognising whether a variable is a stock or a flow, researchers and policymakers can better interpret data, identify trends, and make informed decisions.

Examples of Stock Variables - Capital stock, National wealth, Money supply, Inventory, Government debt, Foreign reserves

Examples of Flow Variables - National income, Government spending, Exports, Investment, Consumption, Imports, Savings

2.2.2.1 Key Characteristics of Stock Variables

- Measured at a point in time.
- Represents an accumulated quantity.
- Units do not involve a time dimension.
- Changes in stock variables occur due to flows.

2.2.2.2 Key Characteristics of Flow Variables

- Measured over a period of time.
- Represents a rate of change or occurrence.
- Units involve a time dimension.
- Flows cause changes in stock variables.

2.2.3 Exogenous and Endogenous Variables

In macroeconomics, the distinction between exogenous and endogenous variables plays a crucial role in analysing economic systems and making informed policy decisions.

2.2.3.1 Exogenous Variables

Exogenous variables are external factors that affect the economy but are not influenced by the economy itself, such as government policies, technological advancements, global events, and changes in consumer preferences. These external factors can have a significant impact on the economy, but they are not determined by the economy's internal dynamics.

2.2.3.2 Characteristics of Exogenous Variables

- Their values are dependent on other variables within the model.
- They are the outputs or targets of the model.
- Changes in other variables within the model will typically lead to changes in the values of endogenous variables.

Examples

- **GDP (Gross Domestic Product):** In a macroeconomic model, GDP is determined by factors like consumption, investment, government spending, and net exports (all potentially endogenous).
- **Inflation rate:** In a macroeconomic model, inflation can be determined by factors like money supply, aggregate demand, and aggregate supply.

2.2.3.3 Endogenous Variables

Endogenous variables are internal factors that are influenced by the economy itself, including GDP growth rate, inflation rate, unemployment rate, and interest rates. These variables are shaped by the interactions within the economy and are often the focus of macroeconomic analysis and policy interventions. Understanding the distinction between exogenous and endogenous variables is essential for identifying the causes of economic changes, developing effective policy interventions, predicting the impact of external shocks on the economy, and analysing the relationships between different economic variables.

2.2.3.4 Characteristics of Endogenous Variables

- Their values are independent of the other variables within the model.
- They are the inputs or drivers of the model.
- Changes in exogenous variables cause changes in the endogenous variables.

Examples

- **Government spending (in some simpler models):** Policy decisions about government spending are often assumed to be determined outside a basic macroeconomic model.
- **World oil prices (for a small open economy model):** The price of oil in the global market is usually taken as given for a single small country.

By recognising the role of exogenous and endogenous variables, macroeconomists can better comprehend the complex interactions within an economy and make more accurate predictions and policy recommendations, ultimately informing decision-making

and shaping economic outcomes.

2.2.4 General Equilibrium and Edgeworth Box

General equilibrium analysis is concerned with the economic system as a whole. It recognises the fact that an economic system is a network in which all the parts are mutually dependent on one another and in mutual interaction with one another. A disturbance in one sector of the economy produces repercussions on all sides. General equilibrium analysis is concerned with the overall effects of a disturbance.

The foundations of general equilibrium were laid by Léon Walras in the 19th century. He developed a model where demand and supply across multiple markets interact to reach an overall equilibrium. In such a state, the prices of goods and services adjust to ensure that demand equals supply in every market, and no agent has the incentive to change their behaviour. It assumes perfect competition, full information, rational agents, and no externalities.

One of the most useful tools to explain general equilibrium in a simple two-person, two-good exchange economy is the Edgeworth box diagram. This diagram was developed by Francis Ysidro Edgeworth and is used to represent all possible allocations of two goods between two individuals.

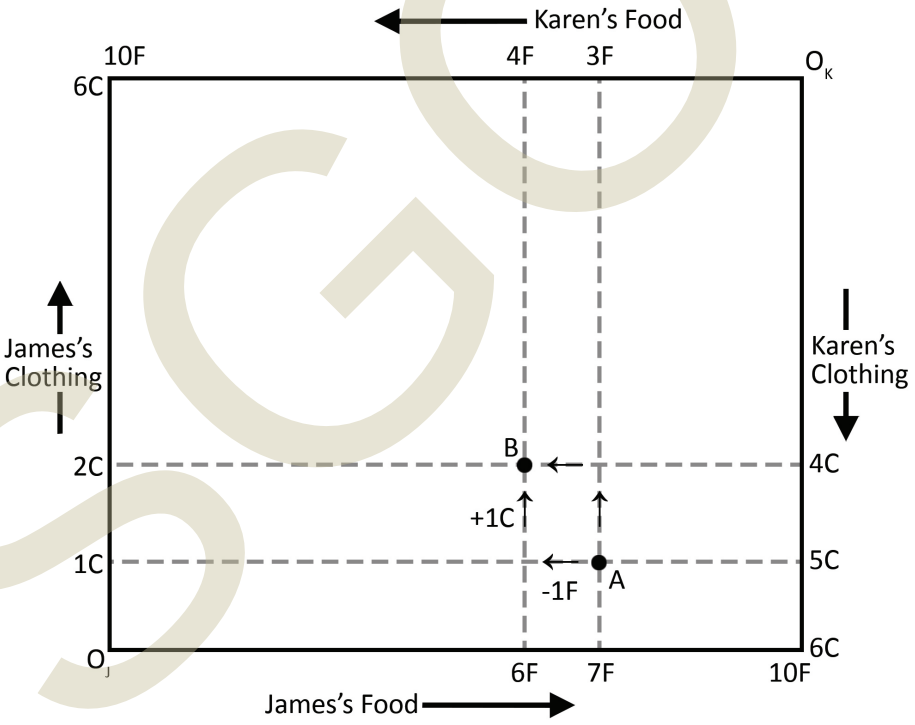

Fig 2.2.1 The Edgeworth Box

The Edgeworth box is a rectangular diagram. The length and width of the box represent the total quantities of two goods in the economy. Each point within the box represents a possible allocation of the two goods between the two individuals. It is a diagram showing all possible allocations of either two goods between two people or of two inputs between two production processes.

The figure shows an Edgeworth box in which the horizontal axis describes the number of units of food and the vertical axis the units of clothing. The length of the box is 10 units of food, the total quantity of food available; its height is 6 units of clothing, the total quantity of clothing available.

Each point in the Edgeworth box simultaneously represents James's and Karen's market baskets of food and clothing. At A, for example, James has 7 units of food and 1 unit of clothing, and Karen has 3 units of food and 5 units of clothing.

James gives up 1F in exchange for 1C, moving from A to B. Karen gives up 1C and obtains 1F, also moving from A to B. Point B thus represents the market baskets of both James and Karen after the mutually beneficial trade.

2.2.5 Macro Models

Macroeconomic models are simplified representations of the complex functioning of an economy. They help economists and policymakers understand how various macroeconomic variables-such as national income, inflation, unemployment, interest rates, and investment-interact with each other. By abstracting from the details of individual behaviour, macro models focus on the behaviour of the economy as a whole. These models are essential tools for analysing economic trends, forecasting future developments, and designing effective policy interventions.

A macro model provides a structured framework to study the aggregate behaviour of economic agents such as households, firms, and governments. These models are typically expressed in terms of mathematical equations or diagrams that link key variables. Macro models aim to explain relationships between inputs (like government spending or tax rates) and outputs (such as GDP growth or inflation).

At their core, macro models are built on certain assumptions about how markets function, how individuals make decisions, and how different sectors of the economy interact. They range from simple static models to complex dynamic models incorporating expectations, policy feedback, and international trade.

2.2.5.1 Types of Macro Models

1. **Classical Models**: These models assume flexible prices and wages, leading to full employment in the long run. Output is determined by supply-side factors such as technology and resources. The classical dichotomy holds, meaning that real variables are unaffected by nominal ones (like money supply).

2. **Keynesian Models**: Introduced by John Maynard Keynes, these models emphasise demand-side factors. They assume price and wage rigidities and suggest that the economy can be stuck in equilibrium with unemployment. Fiscal and monetary policy can be used to manage demand and stabilise the economy.

3. **IS-LM Model**: A widely used Keynesian framework, the IS-LM model explains the interaction between the goods market (IS curve) and the money market (LM curve). It shows how interest rates and income levels are jointly determined by equilibrium in both markets.

2.2.5.2 Importance of Macro Models

Macro models are indispensable in real-world policymaking. Central banks use them to forecast inflation and set interest rates, while governments use them to plan fiscal spending and tax policies. They also help in understanding business cycles, unemployment trends, and the effects of global economic shocks. Macroeconomic models are vital tools for understanding and managing the economy. Though no model captures all aspects of reality, each offers insights into specific economic phenomena. By comparing and refining these models, economists strive to better understand the complex dynamics of modern economies and contribute to sound economic decision-making.

2.2.6 Macroeconomic Goals and Instruments

Macroeconomics is the branch of economics that studies the behaviour and performance of an economy as a whole. A central focus of macroeconomics is achieving certain key economic goals that ensure stability, growth, and prosperity. To reach these goals, governments and central banks use various policy instruments. Understanding these macroeconomic goals and instruments is fundamental to grasping how economies function and how policies are designed and implemented.

2.2.6.1 Macroeconomic Goals

Macroeconomic goals are broad objectives that policymakers aim to achieve for the overall well-being of the economy. The main goals include:

1. **Economic Growth**: It refers to the sustained increase in a country's output of goods and services over time, usually measured by the growth rate of Gross Domestic Product (GDP). A growing economy generates more income and employment, improving living standards.

2. **Full Employment**: It means that all those who are willing and able to work at prevailing wage rates can find employment. It does not imply zero unemployment, as some frictional and structural unemployment may always exist. Achieving full employment is crucial for utilising a nation's human resources effectively.

3. **Price Stability**: It involves maintaining a low and stable rate of inflation. High inflation erodes purchasing power, distorts investment decisions, and creates uncertainty. Deflation, on the other hand, can lead to reduced spending and economic stagnation. Hence, a moderate and stable inflation rate is desirable.

4. **Equitable Distribution of Income**: An equitable distribution of income ensures that economic growth benefits all sections of society, reducing inequality and promoting social justice. While perfect equality is neither possible nor necessarily desirable, extreme disparities can harm social and economic cohesion.

5. **Balance of Payments Stability**: A stable balance of payments indicates that a country is not overly reliant on foreign borrowing or experiencing excessive capital outflows. Persistent deficits or surpluses can lead to currency instability and affect investor confidence.

6. **Sustainable Development**: Sustainable development emphasises long-term economic

growth without degrading the environment or depleting natural resources. This goal has gained prominence due to the growing concern about climate change and environmental degradation.

2.2.6.2 Macroeconomic Instruments

To achieve these goals, governments and central banks use several macroeconomic policy instruments. These can be broadly categorised into:

1. **Fiscal Policy**: Fiscal policy involves the use of government spending and taxation to influence economic activity. Increasing public expenditure or cutting taxes can stimulate demand and growth while reducing spending or increasing taxes can control inflation.
2. **Monetary Policy**: Monetary policy is managed by the central bank and involves controlling the money supply and interest rates. Lowering interest rates encourages borrowing and investment while raising them can curb inflation.
3. **Exchange Rate Policy**: This involves managing the value of the national currency against other currencies. A competitive exchange rate can boost exports while managing volatility is important for economic stability.
4. **Incomes Policy**: Incomes policy refers to government measures to control wages and prices, often used to combat inflation without reducing demand.

2.2.7 Inflation

Inflation is a key concept in macroeconomics, referring to a sustained increase in the general price level of goods and services in an economy over a period of time. When inflation occurs, the purchasing power of money declines, meaning that consumers can buy fewer goods and services with the same amount of money. Understanding the concept of inflation is crucial, as it affects all economic agents-consumers, producers, investors, and policymakers.

2.2.7.1 Types of Inflation

Inflation can be categorised based on its causes or characteristics:

1. **Demand-Pull Inflation**: This type of inflation occurs when aggregate demand exceeds aggregate supply. It is often described as "too much money chasing too few goods." It typically happens in a booming economy where consumption, investment, or government spending increases rapidly.
2. **Cost-Push Inflation**: Cost-push inflation arises when the cost of production increases—due to higher wages, raw material prices, or imported goods—forcing producers to raise prices to maintain profitability.
3. **Built-In Inflation**: Also called wage-price inflation, this type stems from a feedback loop between wages and prices. As prices rise, workers demand higher wages, which in turn increases production costs and leads to further price increases.
4. **Structural Inflation**: This is a long-term form of inflation arising from deep-rooted

structural issues in the economy, such as supply bottlenecks, poor infrastructure, or inefficient markets.

2.2.7.2 Measurement of Inflation

Inflation is measured using various price indices:

- Consumer Price Index (CPI) measures the change in prices of a basket of goods and services consumed by households.
- The Wholesale Price Index (WPI) tracks the price changes at the wholesale level.
- GDP Deflator is a broad measure that reflects the price change in all domestically produced goods and services.

2.2.8 Unemployment

Unemployment is a central concept in macroeconomics that refers to a situation where individuals who are willing and able to work at prevailing wage rates are unable to find employment. It is a key indicator of economic performance and social well-being. A high unemployment rate implies underutilisation of human resources and leads to economic inefficiencies and social challenges.

Unemployment is measured as the percentage of the labour force that is unemployed and actively seeking work. The unemployment rate is calculated as:

$$\text{Unemployment Rate} = \frac{\text{Number of Unemployed Persons}}{\text{Labor Force}} \times 100$$

The labour force includes individuals who are either employed or actively looking for work. Those not seeking employment, such as students, homemakers, and retirees, are excluded.

2.2.8.1 Types of Unemployment

1. **Frictional Unemployment**: This refers to short-term unemployment arising from the time it takes for people to find a job that matches their skills. It includes individuals who are voluntarily changing jobs or entering the labour force for the first time. Frictional unemployment is a normal and unavoidable part of a dynamic economy.
2. **Structural Unemployment**: Structural unemployment occurs due to mismatches between the skills of workers and the needs of employers. It may result from technological changes, shifts in demand, or geographical factors. This type of unemployment tends to be longer-term and requires retraining or relocation.
3. **Cyclical Unemployment**: Cyclical unemployment arises during economic downturns or recessions, when demand for goods and services declines, leading to a reduction in production and jobs. It is directly linked to the business cycle and can be reduced through economic stimulus.
4. **Seasonal Unemployment**: This occurs in industries that are dependent on the time of year, such as agriculture, tourism, and construction. Workers in these sectors

may be employed only during certain seasons.

5. **Disguised Unemployment**: Often found in developing economies, disguised unemployment refers to a situation where more people are employed than are actually needed. For example, in agriculture, several people may be working on a task that only requires one or two, contributing little or no additional productivity.

6. **Natural Rate of Unemployment**: Even in a healthy economy, some level of unemployment persists due to frictional and structural factors. This is referred to as the natural rate of unemployment, which represents the unemployment rate when the economy is at full employment.

2.2.9 Poverty

Poverty is a fundamental concept in economics and social policy, referring to the condition where individuals or groups are unable to satisfy their basic needs for a minimum standard of living. It signifies a lack of income, resources, and opportunities necessary for a dignified life. Poverty is a multidimensional issue that affects economic development, social stability, and human well-being.

Poverty is broadly classified into absolute poverty and relative poverty:

1. **Absolute Poverty** refers to a condition where a person's income is insufficient to meet the basic necessities of life, such as food, clothing, shelter, education, and healthcare. It is measured against a fixed standard or poverty line, such as the World Bank's threshold of $2.15 per day (as of recent global updates in purchasing power parity terms).

2. **Relative Poverty** is defined in comparison to the living standards of the wider society. A person may have enough to survive but is considered poor if their income is significantly lower than the national average, leading to social exclusion and inequality.

2.2.9.1 Causes of Poverty

Poverty arises due to a complex set of factors, including:

- Unemployment and Underemployment
- Low levels of education and skill
- Inequitable distribution of income and assets
- Social discrimination and marginalisation
- Poor governance and weak institutions
- Environmental degradation and climate shocks

These factors often interact and reinforce each other, creating a cycle of poverty that is hard to break.

Recap

- Macroeconomic variables measure economic performance, helping to understand overall economic conditions
- Stock variables are measured at a point in time, while flow variables are measured over a period
- Exogenous variables are determined outside the model, whereas endogenous variables are influenced within the model
- General equilibrium analysis studies how all economic sectors interact,
- Edgeworth Box illustrates optimal resource allocation between two agents
- Macroeconomic models simplify the complex interactions within an economy to help analyse trends and inform policy
- Macroeconomics focuses on stability and growth,
- Inflation is the sustained increase in the price level of goods and services, reducing purchasing power
- Unemployment measures the underutilisation of labour in the economy
- Poverty signifies a lack of resources, where individuals or groups cannot meet basic living standards, impacting both economic and social well-being

Objective Questions

1. What is measured at a specific point in time, stock or flow?
2. Which type of variable is determined outside the economic model, exogenous or endogenous?
3. Who developed the Edgeworth Box?
4. What type of macroeconomic model assumes flexible prices and full employment in the long run?
5. Which macroeconomic goal focuses on maintaining price levels and avoiding inflation?
6. What tool involves government spending and taxation to influence economic activity?

7. What is the term for a sustained increase in the general price level of goods and services?
8. What type of unemployment occurs due to mismatched skills and job requirements?
9. Which macroeconomic instrument is used to control the money supply and interest rates?
10. What is the term for a condition where a person's income is insufficient to meet basic life necessities?

Answers

1. Stock
2. Exogenous
3. Edgeworth
4. Classical
5. Price Stability
6. Fiscal Policy
7. Inflation
8. Structural
9. Monetary Policy
10. Absolute Poverty

Assignments

1. Explain the distinction between stock and flow variables in macroeconomics. Provide examples and discuss their importance in economic analysis.
2. Analyse the role of exogenous and endogenous variables in a macroeconomic model.

3. Discuss the concept of general equilibrium. How does the Edgeworth Box illustrate the efficient allocation of resources in a two-person, two-good economy?
4. What are the main goals of macroeconomics, and how do governments and central banks try to achieve them?
5. Describe the different types of unemployment. How does cyclical unemployment differ from structural unemployment?

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Unit 3

Contemporary Economics

Learning Outcomes

After completing this unit, the learner will be able to:

- understand different market structures
- discuss the concept of cartels
- describe the characteristics and functioning of MNCs

Prerequisites

The study of market structures, corporate strategies, and macroeconomic institutions is rooted in a deep understanding of the complex interactions between economic agents, institutions, and policies. The evolution of economic theories, including the perfect competition model, monopoly, oligopoly, and monopolistic competition, provides a foundation for analysing market structures and corporate strategies. Furthermore, understanding the role of institutions, such as governments, central banks, and regulatory bodies, in shaping economic outcomes is important. The study of macroeconomic institutions, including fiscal and monetary policy, international trade, and finance, provides a framework for analysing the global economy and the interdependencies between nations. By examining the theoretical foundations, historical context, and institutional frameworks, we can develop a clear understanding of the complex relationships between market structures, corporate strategies, and macroeconomic institutions.

Keywords

Cartels, Mergers and Acquisitions, Financial Inclusion, NITI Aayog, Bilateral Trade, Multilateral Trade, Globalisation, Economic Institutions

Discussion

2.3.1 Monopoly

In the age of contemporary economics, market structures determine the dynamics of production, pricing, and consumer welfare. Among these structures, monopoly occupies a unique position. The term 'monopoly' is derived from the words 'mono' and 'poly.' While 'mono' means single, 'poly' means selling. So the literal meaning of monopoly is 'sale by a single firm.' In Economics it refers to a market situation in which competition is zero.

A monopoly refers to a market condition where a single seller dominates the entire supply of a particular product or service, with no close substitutes and significant barriers to entry for other firms. Pure monopoly is a market structure in which a single firm exclusively supplies a product that has no close substitutes. In this case, the firm itself represents the entire industry and faces a downward-sloping demand curve for the product. Consequently, to increase sales, the monopolist must reduce the price of the commodity. As a result, for a monopolist, marginal revenue (MR) is less than price (P), and the MR curve lies below the demand (D) curve.

2.3.1.1 Features of Monopoly

Monopoly is defined by several distinctive features:

1. **Single Seller**: One firm controls the entire market for a good or service.
2. **No Close Substitutes**: Consumers do not have alternative products that are sufficiently similar.
3. **High Barriers to Entry**: Legal, technological, or financial obstacles prevent new firms from entering the market.
4. **Price Maker**: The monopolist has the power to set prices, as it controls supply.
5. **Profit Maximisation**: A monopolist aims to produce the quantity of output where marginal cost equals marginal revenue (MC = MR), leading to maximum profit.

6. **Restricted Output and Higher Prices**: Compared to a perfectly competitive market, monopolies often restrict output and charge higher prices, leading to allocative inefficiency.

2.3.2 Oligopoly

The word oligopoly is derived from two Greek words 'oligos' and 'pollen'. 'While oligos' means a few, 'pollen' means to sell. Therefore, *oligopoly* means sale by a few. In modern market economies, the oligopoly stands as one of the most prevalent and influential forms of market structure. Characterised by the dominance of a few large firms, oligopoly is found in a range of industries—from automobiles and airlines to telecommunications and digital technology. Its presence has become more pronounced in the 21st century, as globalisation, mergers, and technological advancement have led to market consolidation. An oligopoly is a market structure where a small number of large firms control a significant portion of the market. While each firm can influence the market, its decisions are interdependent, meaning each firm must consider the likely reaction of its competitors when making pricing or output decisions.

2.3.2.1 Characterstics of Oligopoly

1. **Few Dominant Firms**: Only a handful of firms hold substantial market power.
2. **Interdependence**: Firms closely watch and respond to each other's strategies.
3. **Barriers to Entry**: High entry costs, economies of scale, and brand loyalty prevent new firms from entering easily.
4. **Non-Price Competition**: Firms often compete through advertising, branding, and product differentiation rather than price.
5. **Price Rigidity**: Prices in oligopolistic markets tend to be stable over time due to the fear of price wars.

2.3.2.2 Types of Oligopolies

Oligopolies can take various forms depending on the nature of the products and the behaviour of firms:

1. **Collusive Oligopoly**: Firms cooperate, either formally or informally, to control prices or output. An example is OPEC, where member countries coordinate oil production to influence prices.
2. **Non-Collusive Oligopoly**: Firms act independently but remain aware of each other's actions. Here, price competition is rare due to the risk of retaliatory pricing.
3. **Homogeneous Oligopoly**: Firms produce identical or nearly identical products (e.g., steel, cement).
4. **Differentiated Oligopoly**: Firms offer similar but not identical products (e.g., smartphones, cars, soft drinks).

2.3.3 Cartels

In modern market economies, cartels represent a serious concern for fair competition and consumer welfare. A cartel is a formal or informal agreement among competing firms to control prices, limit production, divide markets, or restrict innovation, practices that undermine the principles of a competitive market. Cartels typically emerge in oligopolistic industries, where a few large firms dominate and can benefit from collusion. Though cartels may lead to short-term gains for participating firms, they usually harm consumers, reduce economic efficiency, and are outlawed in most countries. The key features of cartels include:

1. **Collusion**: Firms work together to fix prices, restrict output, or allocate markets.
2. **Market Power**: Cartels form in oligopolies where firms individually lack monopoly power but can collectively control the market.
3. **Secret or Open Agreements**: Some cartels operate in the open (e.g., OPEC), while others operate secretly, in violation of antitrust laws.
4. **Enforcement Mechanisms**: Cartels often include systems to monitor and punish members who deviate from the agreement.
5. **Unstable Nature**: Cartels are inherently unstable due to incentives to cheat, legal risks, and changing market conditions.

2.3.3.1 Types of Cartels

Cartels can take several forms, depending on their focus and structure:

1. Centralised Cartel

In a centralised cartel, all member firms coordinate under a single decision-making body to maximise total joint profits. The cartel sets the price and total output for the entire industry, similar to a monopolist. Production is allocated among firms to minimise total costs, and profits are distributed based on a mutually agreed formula. This model represents complete collusion and strict control.

2. Market-Sharing Cartel

A market-sharing cartel is less rigid and involves an agreement among firms to divide the market, usually by setting quotas or fixing market shares. Each firm acts independently in terms of production but abides by the agreed division. Under certain conditions - like identical cost structures this type of cartel can also replicate monopoly outcomes. However, the arrangement depends heavily on trust and mutual compliance.

2.3.4 Mergers and Acquisitions

A merger occurs when two or more companies combine to form a single entity, often with the goal of creating synergies, expanding market reach, or improving efficiency. An acquisition, on the other hand, involves one firm taking control of another, either through the purchase of shares or assets. In oligopolistic industries, these strategies can change the market significantly. Since oligopoly already implies limited competition, further consolidation through mergers and acquisitions can tilt the balance toward monopolistic

behaviour, depending on the number of remaining players and the nature of their interactions.

2.3.4.1 Types of Mergers

1. **Horizontal Mergers**: These involve firms in the same industry and at the same stage of production (e.g., two automobile manufacturers). Horizontal mergers directly reduce the number of competitors, making them highly relevant in oligopoly analysis.

2. **Vertical Mergers**: These occur between firms at different stages of the supply chain (e.g., a manufacturer and a supplier). While not always reducing competition directly, vertical mergers can give firms strategic control over resources and distribution.

3. **Conglomerate Mergers**: Involving firms from unrelated industries, these are less significant in oligopoly theory but may have strategic value.

4. **Market-Extension and Product-Extension Mergers**: These allow firms to enter new markets or broaden product offerings, strengthening their overall market position without necessarily reducing the number of competitors.

Mergers and acquisitions play a key role in shaping the dynamics of oligopolistic markets. While they can improve efficiency, promote innovation, and strengthen global competitiveness, they also raise critical concerns about market power, competition, and consumer welfare. Contemporary oligopoly models help us understand the strategic motivations and outcomes of mergers and acquisitions, while regulatory frameworks aim to balance the benefits of consolidation with the need to maintain fair and open markets. As markets evolve, especially in the digital economy, the challenge for economists and policymakers is to ensure that mergers and acquisitions serve broader economic and social interests, not just the ambitions of dominant firms.

2.3.5 Multinational Corporations and Financial Inclusion

In the era of globalisation and digital transformation, financial inclusion has emerged as a cornerstone of inclusive economic growth. Financial inclusion defined as the process of ensuring access to appropriate and affordable financial services to all, has evolved from a developmental concern into a mainstream economic agenda. Simultaneously, Multinational Corporations (MNCs), with their global operations, technological prowess, and investment capacity, are increasingly seen not only as economic actors but also as enablers of inclusive development.

2.3.5.1 The Evolving Role of MNCs in Financial Inclusion

Multinational Corporations traditionally functioned as engines of foreign investment, job creation, and technology transfer. However, in recent decades, their role has expanded to include social objectives aligned with Corporate Social Responsibility (CSR), Environmental, Social and Governance (ESG) goals, and sustainable development. Financial inclusion is increasingly seen as a strategic area where business goals and social impact intersect.

1. **Digital Financial Infrastructure:** MNCs in the technology and fintech sectors have been key in expanding digital finance. Companies such as **Google**, **Amazon**, and **Meta** have developed digital wallets and payment interfaces that reach millions, including the previously unbanked. For instance, Google Pay and Amazon Pay

have expanded access to digital payments in India and South East Asia, supported by smartphone proliferation and government-backed initiatives like India's Unified Payments Interface (UPI).

2. **Financial Services and Credit Innovation:** MNCs in finance, such as **Visa**, **Mastercard**, and **PayPal**, are partnering with local banks and microfinance institutions to offer customised financial products to underserved populations. Through biometric-based KYC (Know Your Customer) and AI-driven credit scoring, these companies are lowering barriers to formal financial services for low-income individuals who lack conventional credit histories.

3. **Inclusive Business Models:** Companies like Nestlé, Coca-Cola, and Unilever integrate rural producers, micro-retailers, and last-mile distributors into their global value chains. These informal actors often receive training, access to micro-loans, and digital payment tools from the parent company or its partners. Such initiatives enhance not only supply chain efficiency but also financial inclusion for small-scale entrepreneurs.

4. **Investment in Fintech Startups:** Through venture capital arms or impact funds, MNCs invest in fintech startups focused on inclusive finance. For example, Mastercard's Center for Inclusive Growth supports tech-driven enterprises in Africa and Asia that offer microloans, savings platforms, and insurance products. These investments create scalable models for delivering financial services to the base of the pyramid.

Multinational Corporations are emerging as key actors in promoting financial inclusion, particularly in developing economies. By utilising technology, reimagining business models, and investing in underserved markets, MNCs contribute to economic empowerment, financial system development, and poverty alleviation. However, their role must be carefully regulated and ethically guided to ensure that inclusion is not superficial or exploitative.

2.3.6 Markets

In ordinary language, a market means a place where goods are bought and sold. But, in economics, the term market does not refer to a place. In economics, market refers to a group of buyers and sellers dealing in a particular commodity (e.g. gold market, oil market, car market, fruit market etc.)

In traditional economics, a market is defined as any arrangement that allows buyers and sellers to exchange goods, services, or resources. Classical economists like Adam Smith emphasised the role of the "invisible hand," whereby individuals pursuing their self-interest inadvertently contribute to the collective good through market mechanisms.

Modern economic theory, however, expands this view by analysing various types of markets:

- **Perfectly competitive markets**, where many buyers and sellers interact, and no one has market power.
- **Monopolistic and oligopolistic markets**, where fewer firms influence price and output.

- **Labour, capital, and financial markets**, where resources are allocated across economic sectors.

Contemporary economics goes further to assess how imperfect information, externalities, and institutional frameworks affect market outcomes.

In the 21st century, markets have become more dynamic and interconnected than ever before. Several trends shape markets in contemporary economics:

1. **Digital Markets:** The rise of e-commerce platforms such as Amazon, Alibaba, and Flipkart has revolutionised how markets operate. These digital marketplaces transcend geography, allowing buyers and sellers across the globe to transact efficiently.

2. **Financial Markets and Global Capital Flows:** Contemporary economics places great emphasis on **financial markets**, which facilitate the movement of capital between investors and borrowers. Stock exchanges, bond markets, and currency markets influence national economies and are sensitive to global trends, such as interest rate changes, inflation, and geopolitical risks.

3. **Labour Markets and the Gig Economy:** Modern labour markets are increasingly flexible, with the emergence of the **gig economy** and platform-based work (e.g., Uber, Swiggy, Upwork). While these provide job opportunities and freedom, they also raise concerns about job security, fair wages, and benefits.

4. **Informal and Shadow Markets:** In developing economies, a significant share of economic activity occurs in informal markets that operate outside formal legal and regulatory frameworks. These include street vendors, small-scale artisans, and unregistered businesses. While they provide livelihoods to millions, they often lack protection and access to credit or legal remedies.

Markets remain fundamental to contemporary economics, not just as mechanisms for price determination and resource allocation, but as dynamic institutions embedded within broader social, technological, and political systems. Their role has expanded beyond traditional boundaries, influenced by digital innovation, globalisation, and the rise of service and knowledge economies.

2.3.7 Budget

Budget is a powerful policy tool that reflects the government's economic priorities, political commitments, and social responsibilities. A national budget shapes the path of economic development, addresses inequality, manages inflation, and promotes inclusive growth. With increasing globalisation, digitisation, and fiscal pressures, the structure and function of budgets have evolved significantly in recent decades.

A budget, in economic terms, is a detailed estimate of government revenue and expenditure for a given period, usually one fiscal year. It outlines how the government plans to collect resources (mainly through taxes and borrowings) and how it intends to spend them in various sectors.

A typical government budget has two main components:

1. **Revenue Budget**: This includes revenue receipts (tax and non-tax) and revenue expenditures. A revenue deficit occurs when expenditure exceeds receipts.

2. **Capital Budget**: It includes capital receipts (like borrowings and disinvestment) and capital expenditures (like infrastructure development and loan repayments).

The budget serves multiple strategic purposes beyond balancing accounts. Three major objectives of budget are:

1. **Allocation of Resources:** Governments use the budget to allocate resources to priority sectors such as education, healthcare, defence, and infrastructure. Efficient allocation ensures optimal use of public funds to stimulate economic growth.

2. **Redistribution of Income:** Progressive taxation and targeted welfare schemes in the budget aim to reduce income inequality. Subsidies, pensions, and rural employment programs (e.g., MGNREGA in India) help uplift marginalised sections.

3. **Economic Stabilisation:** Through fiscal policies embedded in the budget, the government can counter inflation, recession, or demand-supply shocks. For instance, increased public spending during an economic downturn can boost aggregate demand, a Keynesian approach to economic stabilisation.

4. **Promotion of Inclusive and Sustainable Growth:** Modern budgets incorporate programs aimed at gender budgeting, green energy, digital infrastructure, and rural development. These reflect an effort to integrate economic goals with environmental and social sustainability.

The budget is not merely a financial statement, it is a roadmap for a nation's economic vision. It influences growth trajectories, corrects market failures, redistributes wealth, and responds to emerging challenges such as digital disruption, pandemics, and climate change.

2.3.8 The Reserve Bank of India

The Reserve Bank of India (RBI), established in 1935, is the central bank of the country and plays a pivotal role in shaping India's economic landscape. While its primary functions have traditionally included regulating currency and controlling inflation, its role has expanded significantly in contemporary times. In today's fast-evolving economic environment, marked by globalisation, technological change, financial innovation, and periodic crises, the RBI acts not just as a monetary authority, but also as a developmental institution, regulator, and financial system stabiliser.

The RBI performs several traditional functions as the central bank of India:

1. **Monetary Policy**: RBI controls money supply and interest rates to maintain price stability and support economic growth. It uses tools like repo rate, reverse repo rate, Cash Reserve Ratio (CRR), and Statutory Liquidity Ratio (SLR).

2. **Currency Issuance**: It has the sole authority to issue currency notes (except coins)

and ensures adequate currency supply in the economy.

3. **Regulation of Banks and NBFCs**: The RBI regulates and supervises banks and non-banking financial companies to maintain financial stability and consumer trust.

4. **Foreign Exchange Management**: Under the FEMA Act, the RBI manages India's foreign exchange reserves and ensures exchange rate stability.

5. **Debt Management**: The RBI acts as the banker to the Government of India and manages its public debt.

In contemporary economics, the Reserve Bank of India stands as a cornerstone institution navigating the complexities of a growing and integrating economy. Its evolving role, ranging from inflation control to digital innovation, from financial inclusion to global integration, highlights its adaptability and importance. As India moves toward becoming a $5 trillion economy, the RBI's responsibilities will only grow. Its success will depend on its ability to remain independent, transparent, technologically adaptive, and responsive to both domestic and global economic developments. In essence, the RBI not only guards the financial system but also steers the Indian economy toward sustainable and inclusive growth.

2.3.9 NITI Aayog

The NITI Aayog (National Institution for Transforming India), established on 1st January 2015, replaced the Planning Commission as the premier policy think tank of the Government of India. Its formation marked a significant shift in the approach to economic planning and governance in India - from centralised, top-down control to a more decentralised, cooperative, and evidence-based framework. In the context of contemporary economics, where innovation, inclusivity, sustainability, and responsiveness to global trends are vital, NITI Aayog plays a pivotal role in shaping India's economic and developmental strategy.

The Planning Commission, established in 1950, followed a centralised model based on five-year plans to direct economic development. While it contributed significantly to India's early industrial and agricultural growth, it became increasingly outdated in a liberalised and globalised economy. By contrast, NITI Aayog was created to be a think tank and policy advisory body that promotes cooperative federalism, embraces competitive performance among states, and incorporates data-driven, real-time policy feedback. It was designed to align governance with the needs of a 21st-century economy driven by innovation, entrepreneurship, and sustainable development.

NITI Aayog's role is multifaceted. Its primary goals include:

1. **Policy Formulation and Strategic Planning**: NITI Aayog assists in long-term strategic planning aligned with national development goals, such as the Sustainable Development Goals (SDGs) and Vision 2047 for India's 100th year of independence.

2. **Fostering Cooperative and Competitive Federalism**: Through forums like the Governing Council, it brings together Chief Ministers and Union Ministers to align national and state-level priorities. It also ranks states on various indices (e.g.,

Health Index, School Education Quality Index), encouraging performance-based competition.

3. **Promoting Innovation and Entrepreneurship**: The Atal Innovation Mission (AIM), one of its flagship initiatives, promotes startup culture, innovation labs, and incubators across educational institutions and cities.

4. **Monitoring and Evaluation**: It uses real-time data and analytics to evaluate government schemes and recommend course corrections, ensuring evidence-based policymaking.

5. **Public-Private Partnerships and Sustainable Development**: NITI Aayog facilitates collaboration with industry and civil society to improve infrastructure, education, health, and energy through targeted interventions and reforms.

NITI Aayog represents a significant shift in India's approach to economic planning and governance, aligning with contemporary economic challenges and opportunities. As a policy catalyst, it plays a central role in promoting inclusive growth, innovation, digital transformation, and sustainable development. In a world marked by rapid change, NITI Aayog's success will depend on its ability to remain flexible, evidence-driven, and collaborative. By bridging the gap between strategy and execution, and by fostering a more integrated and responsive policy environment, NITI Aayog can lead India toward becoming a globally competitive and economically resilient nation.

2.3.10 Exchange Rate

An exchange rate is the rate at which one currency is exchanged for another. Thus an exchange rate can be regarded as the price of one currency in terms of another. This is a fundamental concept in international economics. It influences a country's trade competitiveness, capital flows, inflation, and overall economic stability. In the context of contemporary economics, the exchange rate has gained even greater importance due to increasing globalisation, volatile financial markets, and technological integration in currency trading. Exchange rates today are not merely technical figures; they reflect the pulse of national economies in a highly interconnected world.

Countries adopt different types of exchange rate systems based on their macroeconomic priorities, external sector dynamics, and institutional capacity. The major types include:

1. **Fixed Exchange Rate**: The value of the currency is pegged to another currency or a basket of currencies. For example, the UAE dirham is pegged to the US dollar.

2. **Floating Exchange Rate**: The value is determined by market forces of demand and supply. The US dollar, Euro, and Japanese Yen operate under this regime.

3. **Managed Float (or Dirty Float)**: A hybrid system in which the central bank intervenes occasionally to stabilise the exchange rate without a fixed peg. India follows a managed floating exchange rate system.

4. **Currency Board Arrangements**: A rigid form of fixed regime where the domestic currency is backed 100% by foreign reserves.

Exchange rates are influenced by a set of factors such as,

- **Interest Rates**: Higher interest rates attract foreign capital, increasing demand for the domestic currency.
- **Inflation Rates**: Lower inflation typically strengthens a currency's value, as purchasing power is preserved.
- **Balance of Payments**: Trade deficits put downward pressure on a currency, while surpluses support it.
- **Speculation and Market Sentiment**: Traders' expectations about future economic performance or political stability can cause large swings.
- **Capital Flows**: Inflows of foreign direct investment (FDI) or portfolio investment can appreciate the exchange rate.
- **Central Bank Intervention**: Active buying/selling of foreign currencies by central banks influences short-term trends.

The exchange rate is not just a price of foreign currency, it is a strategic economic variable that reflects and influences a nation's financial health. Exchange rates impact trade, investment, inflation, and external debt sustainability. In an era of high interdependence, exchange rate management has become both a domestic and a global challenge. For countries like India, maintaining a stable, market-determined, yet flexible exchange rate is essential for long-term economic growth. Going forward, the integration of technology, digital currencies, and regional trading blocks will further redefine how exchange rates are understood and managed in the global economy.

2.3.11 Bilateral and Multilateral Trade

In today's globalised world, trade is a vital driver of economic growth, job creation, and innovation. Countries engage in international trade to access goods and services not available domestically, to benefit from comparative advantage, and to promote diplomatic and economic ties. In contemporary economics, trade relations are shaped primarily through bilateral and multilateral agreements. While bilateral trade involves trade deals between two countries, multilateral trade includes agreements involving three or more nations or facilitated through international organisations like the World Trade Organisation (WTO).

Bilateral trade refers to trade conducted between two countries, typically governed by a formal agreement that outlines provisions such as tariff reductions, trade facilitation, investment protection, and mechanisms for dispute resolution. These agreements are tailored to the specific economic interests and political priorities of the countries involved. One of the key advantages of bilateral trade agreements is their speed and flexibility, as negotiations are often quicker and less complex compared to multilateral deals. They also allow for customised solutions, enabling countries to focus on particular industries or sectors of mutual interest. Moreover, such agreements can improve political relations by fostering stronger diplomatic ties and promoting regional cooperation.

Multilateral trade refers to trade conducted among multiple countries based on commonly agreed rules aimed at reducing trade barriers and promoting global commerce. The

World Trade Organisation (WTO), established in 1995, serves as the principal forum for negotiating and implementing multilateral trade agreements. The benefits of multilateral trade are substantial. It offers global market access, allowing countries to trade more freely across borders under a unified regulatory framework. The WTO also provides a structured dispute resolution mechanism, enabling member states to resolve trade conflicts legally and peacefully. Additionally, multilateral trade promotes fair competition by ensuring equal treatment for all participants, and it contributes to economic efficiency and growth by reducing tariffs, stimulating competition, and facilitating the transfer of technology among nations.

Table 2.3.1. Bilateral and Multilateral Trade

Feature	Bilateral Trade	Multilateral Trade
Number of Participants	Two countries	Three or more countries
Negotiation Speed	Relatively fast	Time-consuming and complex
Customisation	Highly tailored to mutual interests	Generalised rules for all members
Scope of Impact	Limited to parties involved	Broad global or regional impact
Examples	India-UAE CEPA, India-Japan CEPA	WTO, RCEP, EU trade policies

Bilateral and multilateral trade agreements are essential tools in shaping the economic fortunes of nations in the 21st century. While bilateral deals offer speed and customisation, multilateral frameworks provide stability, predictability, and a rules-based order. Successful trade strategies require a blend of both approaches, aligned with national development goals, global standards, and the changing landscape of international relations. As trade continues to be a base of economic growth, countries must engage thoughtfully, ensuring inclusivity, sustainability, and strength in their trade policies.

Recap

- A monopoly is a market dominated by a single seller with no close substitutes, allowing control over prices
- Oligopoly, few large firms dominate the market, leading to interdependent pricing and strategic behaviour
- Firms in an oligopoly may collude to fix prices or limit output, reducing competition is called Cartels
- Mergers and acquisitions are strategic moves where companies combine or take over others to increase efficiency, market share, or reduce competition
- Multinational corporations are large firms that operate in multiple countries
- Financial inclusion is an initiative aimed at ensuring access to affordable financial services for all sections of society
- Markets are complex systems where buyers and sellers interact to exchange goods, services, or financial instruments, facilitating economic activity
- A budget is a government's annual financial plan, detailing projected revenues and expenditures to effectively manage the economy
- RBI plays a vital role in regulating monetary policy, issuing currency, and maintaining the stability of the financial system
- NITI Aayog is a policy think tank that promotes cooperative federalism, strategic planning, and innovation in governance to promote sustainable development
- The exchange rate is the value of one currency relative to another, significantly influencing trade, investment, and inflation
- Bilateral and multilateral trade agreements facilitate international trade between two or multiple countries, improving economic cooperation and promoting global economic growth

Objective Questions

1. Which market structure has a single seller?
2. What do we call a collusive group of firms fixing prices?

3. Which organisation replaced the Planning Commission?
4. Which institution regulates monetary policy in India?
5. What term describes trade between two countries?
6. Which type of corporation operates in multiple countries?
7. What do we call the value of one currency in terms of another?
8. What is the government's annual financial statement called?
9. Which market structure involves a few large firms dominating the market?

Answers

1. Monopoly
2. Cartel
3. NITI Aayog
4. RBI
5. Bilateral
6. MNC
7. Exchange Rate
8. Budget
9. Oligopoly

Assignments

1. Discuss the features of monopoly and oligopoly markets.
2. Discuss on mergers, acquisitions and MNCs.
3. Write a note on financial inclusion.

4. Define a budget and dicuss its importance in government planning.
5. Differentiate between bilateral and multilateral trade.

Reference

1. Samuelson, P. A., & Nordhaus, W. (2010). *Economics* (19th ed.). McGraw-Hill.

Suggested Reading

1. Pindyck, R. S., Rubinfeld, D. L., & Mehta, P. L. (2013). *Microeconomics* (7th ed.). Pearson Education Prentice Hall.
2. Froyen, R. T. (2005). *Macroeconomics* (2nd ed.). Pearson Education Asia.

MODEL QUESTION PAPER SETS

SREENARAYANAGURU OPEN UNIVERSITY

QP CODE: ……

Reg. No.: …….....

Name: ……...……...

MODEL QUESTION PAPER I
SIXTH SEMESTER - BA ECONOMICS EXAMINATION
GENERAL ELECTIVE COURSE – B21EC01GE
ECONOMICS FOR EVERYDAY LIFE
(CBCS - UG)
2022-23 - Admission Onwards

Time: 3 Hours

Max Marks: 70

Section A - Objective Type Questions

I Answer any 10 questions. Each question carries 1 mark

1. Which economist defined economics as a science of wealth?
2. What is the basic law that explains the inverse relationship between price and quantity demanded?
3. Name the British economist who gave the scarcity definition of economics.
4. Which approach examines the link between past and present economic variables?
5. What do you call a variable measured at a specific point in time?
6. What does a point inside the PPC indicate?
7. What is a merger?
8. Name one factor that can cause an outward shift in the PPC.
9. What is the shape of a normal demand curve?
10. Which type of economics involves value judgements?
11. What is the term for buying and selling of goods and services between two countries?
12. What kind of economics is testable and based on empirical evidence?
13. Give one example of a multinational corporation.
14. What tool is used to compare two equilibrium positions?
15. What does GDP stand for?

(10×1=10 marks)

Section B- Very Short Answer

II Answer any 10 questions. Each question carries 2 marks

16. Define elasticity of demand.
17. What is a stock variable?
18. Define opportunity cost with an example.
19. Define microeconomics.
20. Define inflation.
21. Write a short note on the concave shape of the PPC.
22. Define monopoly.
23. State Samuelson's definition of economics.
24. What is meant by financial inclusion?
25. State any two characteristics of positive economics.
26. Define exchange rate.
27. Define positive economics.
28. What are exogenous variables?
29. What is meant by comparative statics?
30. Define unemployment.

(10×2=20 marks)

Section C- Short Answer

III Answer any 5 questions. Each question carries 4 marks.

31. Differentiate between microeconomics and macroeconomics with examples.
32. Explain the determinants of demand other than price.
33. Explain the role of MRT in understanding trade-offs in production.
34. Explain the differences between exogenous and endogenous variables with examples.
35. Explain the importance of comparative statics in analysing policy changes.
36. Describe the features and implications of a monopoly market.
37. Discuss the difference between a shift and a rotation in the PPC.
38. Describe the role of bilateral and multilateral trade agreements in global trade.
39. Discuss the concept of unemployment and its types.
40. Explain the role of scarcity and choice in determining opportunity cost.

(5×4=20 marks)

Section D- Long Answer/Essay

IV Answer any 2 questions. Each question carries 10 marks.

41. Distinguish between positive and normative economics. How do both contribute to economic analysis?

42. Discuss the major characteristics of monopoly, oligopoly, and cartels with suitable examples.

43. Describe the Production Possibility Curve in detail. Explain its assumptions and features.

44. Discuss in detail the macroeconomic goals and the instruments used to achieve them. What are the causes, effects, and policy measures for controlling inflation and unemployment?

(2×10=20 marks)

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MODEL QUESTION PAPER II
SIXTH SEMESTER - BA ECONOMICS EXAMINATION
GENERAL ELECTIVE COURSE – B21EC01GE
ECONOMICS FOR EVERYDAY LIFE
(CBCS - UG)
2022-23 - Admission Onwards

Time: 3 Hours Max Marks: 70

Section A - Objective Type Questions

I Answer any 10 questions. Each question carries 1 mark

1. Name the two major branches of economics.
2. Which institution is responsible for monetary policy in India?
3. What does an inward shift of the PPC represent?
4. Which type of unemployment is caused by a mismatch of skills and job availability?
5. What does a rightward shift in the supply curve indicate?
6. What does PPC stand for in economics?
7. Name the institution that replaced the Planning Commission in India?
8. Write the Greek word from which the term ‘Economics’ is derived.
9. What causes a movement along the supply curve?
10. Who is considered the father of modern economics?
11. Name one factor other than price that can shift the demand curve.
12. What is the shape of a typical production possibility curve?
13. State the law of Supply.
14. What term refers to the study of economic phenomena at a point in time?
15. Expand the term MNC.

(10×1=10 marks)

Section B- Very Short Answer

II Answer any 10 questions. Each question carries 2 marks

16. Define scarcity with an example.
17. What is market demand.
18. State normative economics.
19. What is meant by the problem of 'What to produce'?
20. Write a very short note on contraction of supply?
21. What is meant by allocative efficiency?
22. Define the supply function.
23. How does Alfred Marshall describe economics?
24. Name any two macroeconomic goals.
25. What do you understand by economic statics?
26. State bilateral trade.
27. Define macroeconomics.
28. What are cartels?
29. How does technological change affect the PPC?
30. Write a very short note on fiscal policy.

(10×2=20 marks)

Section C- Short Answer

III Answer any 5 questions. Each question carries 4 marks.

31. Describe Robbins's definition of economics and its relevance to scarcity and choice.
32. State the different degrees of price elasticity of demand.
33. Explain the concept of opportunity cost using an example from everyday life.
34. Discuss the importance of macroeconomic goals in economic planning.
35. Assess the role of static analysis in policy evaluation.
36. Explain the working of monetary policy in regulating economic activity.
37. Differentiate between positive and normative economics with suitable examples.
38. Discuss the objectives and challenges of financial inclusion in India.
39. Explain the functioning of oligopoly with suitable examples.
40. Discuss the concept of 'For whom to produce' and its relation to income distribution.

(5×4=20 marks)

Section D- Long Answer/Essay

IV Answer any 2 questions. Each question carries 10 marks.

41. What are the four fundamental economic problems. Explain in detail the interdependence between scarcity, choice, and opportunity cost in economics.

42. Discuss the difference between expansion/contraction and shift in both demand and supply curves.

43. Define and explain the concepts of statics, dynamics, and comparative statics in economics. Discuss the differences between static and dynamic analysis. Use suitable illustrations to support your answer.

44. Explain the institutional roles of the Budget, Reserve Bank of India, and NITI Aayog in managing the Indian economy.

(2×10=20 marks)

സർവ്വകലാശാലാഗീതം

വിദ്യയാൽ സ്വതന്ത്രരാകണം
വിശ്വപൗരരായി മാറണം
ഗ്രഹപ്രസാദമായ് വിളങ്ങണം
ഗുരുപ്രകാശമേ നയിക്കണേ

കൂരിരുട്ടിൽ നിന്നു ഞങ്ങളെ
സൂര്യവീഥിയിൽ തെളിക്കണം
സ്നേഹദീപ്തിയായ് വിളങ്ങണം
നീതിവൈജയന്തി പാറണം

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ബോധരശ്മിയിൽ തിളങ്ങുവാൻ
ജ്ഞാനകേന്ദ്രമേ ജ്വലിക്കണേ

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NO TO DRUGS

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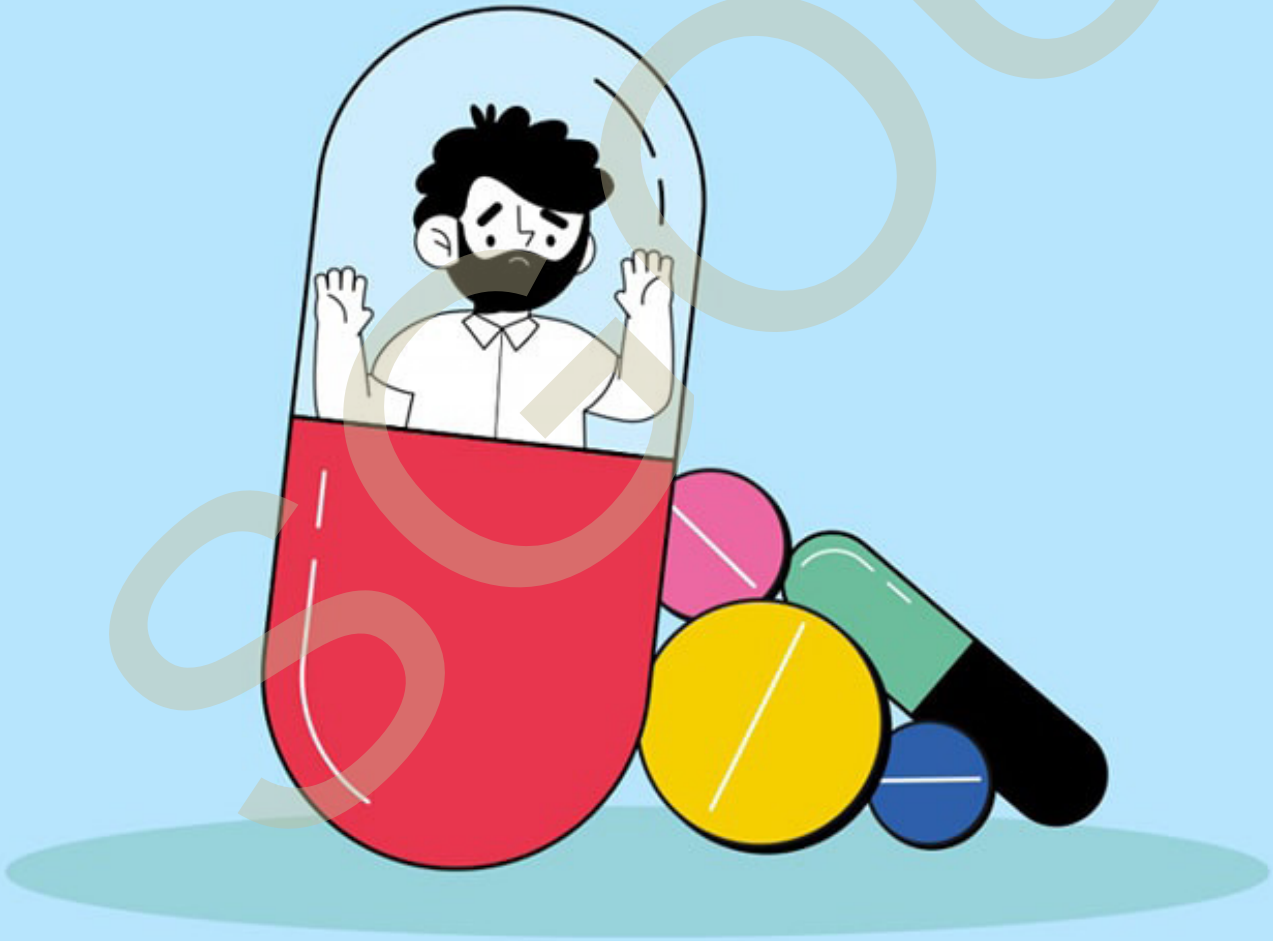

NO TO DRUGS

ആരോഗ്യ കുടുംബക്ഷേമ വകുപ്പ്, കേരള സർക്കാർ

Economics for Everyday Life

COURSE CODE: B21EC01GE

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ISBN 978-81-986991-9-0

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