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મશબ/1219/245/છ, તા. 18-3-2019 –થી મંજૂર

ECONOMICS

Standard 11



PLEDGE

India is my country.

All Indians are my brothers and sisters.

I love my country and I am proud of its rich and varied heritage.

I shall always strive to be worthy of it.

I shall respect my parents, teachers and all my elders and treat everyone with courtesy.

I pledge my devotion to my country and its people.

My happiness lies in their well-being and prosperity.

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PREFACE

The Gujarat Secondary and Higher Secondary Board has prepared the new syllabi in accordance with the syllabi at the national level. These syllabi are approved by the Government of Gujarat.

The Gujarat State Board of School Textbooks takes pleasure in presenting this textbook to the students. It is prepared according to the new syllabus of **Economics** for **Std. 11**.

This textbook is written and reviewed by expert teachers and professors. This textbook is published after incorporating the necessary changes suggested by the reviewers.

The Board has taken ample care to make this textbook interesting, useful and free of errors. However, suggestions are welcome to improve the quality of this book from persons having interest in education.

P. Bharathi (IAS)

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FUNDAMENTAL DUTIES

It shall be the duty of every citizen of India :*

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the national constantly rises to higher levels of endeavour and achievement;
- (k) to provide opportunities for education by the parent or the guardian to his child or ward between age of 6 to 14 years, as the case may be.

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Introduction

Human beings are intellectual creatures and thus they are able to group, distinguish and examine their surroundings and environments. To ensure a happy living, they have created various institutions like the social, political and economic systems.

In order to understand such systems significantly, sustain them over a long period of time and to resolve the complexities in such systems, human beings formulated certain principles based upon various philosophies and sciences.

In the pre-historic and in the earlier historic periods, human beings dealt with differences and solved certain complexities by entering in feuds, fights and battles. However, with the development and progress of civilizations, human beings were able to logically resolve differences and complexities of life by creating and using philosophical principles. And, economics developed as a philosophy and science of rational economic behaviour.

1.1 Meaning of Economics

The word economics in Indian thought is 'arthshashtra' which is derived from the Sanskrit word 'arth' meaning 'purpose' or 'goal'. And thus, 'arthshashtra' in Sanskrit means, "the science of benefits or purpose in practical life". It describes that the purpose of human behaviour is to seek benefits.

The English word economics is a derivative from the Greek word 'Oikonomos'. 'Oikos' means households and 'nomos' means management and hence economics means, 'management of households'.

1.2 Economics in Indian Thought

The history of Indian culture is almost more than five thousand years old and thus Indian philosophy depicts various aspects of human life and provides insights into "a way of life".

The four 'purusharthas' (purposes of a human being) in Indian philosophy are 'dharma' (righteousness, duty), 'arth' (purpose, benefit, wealth), 'kama' (desire) and 'moksha' (liberation). And, the activities of life done for 'arth' (benefits) are the subject matter of economics.

Any activity done with the purpose of obtaining some benefit is called an economic activity and it is one of the four goals or duties of a human being to create wealth as a means of living and for material pleasures (in other words, perform activity for benefits).

2500 years ago, Kautilya who is also known as Chanakya discussed in his book 'Arthashastra' the purpose of economic activity undertaken by a state and society. According to Kautilya, the intention of a human being is 'arth' (wealth); the piece of land which has human settlement is 'arth' (wealth) and thus the science explaining the purpose and utility of wealth creation on earth is called economics.

1.3 Development of Economics as a Science in the West

Greek philosopher Aristotle gave his views on economics in his book 'Oeconomica'.

However, with the advent of industrial revolution, just as division of labour and specialization were introduced in the industrial sector (where a piece of work is done by a worker or a group of workers who specialize only in that particular job); the knowledge of philosophy also started getting classified into various specialized sciences.

Now, like the physical sciences, the social sciences also developed as specialized branches and their methodologies were no longer based purely upon descriptive logic but these sciences started applying scientific tools and methods.

Hence studying purposeful human activity was not solely a subject matter of political or social philosophy but it also developed as an independent science.

And, pondering upon the creation of wealth, Adam Smith wrote in 1776 a book titled "An Inquiry into the Nature and Causes of Wealth of Nations". The book is popularly known as 'Wealth of Nations'. With this book Adam Smith is known to have pioneered the development of economics as a specialized area of knowledge in the west. Industrial revolution created a new socio-economic way of life and new methods of wealth creation with the introduction of machines and huge investments in means of mass production.

Definition of Economics by Adam Smith : "Economics is the study of the nature and causes of wealth of nations". (Economics studies the exchange of physical wealth produced by labour.)

Adam Smith introduced economics as a social science because on the one hand he studied human efforts and on the other hand his methodology was scientific. Since the times of Adam Smith economics was studied as an independent science and not as part of general philosophy. In a way, he talked about human welfare only in his book.

Definition of Economics by Alfred Marshall : In his book, "Principles of Economics" published in 1890, Alfred Marshall defines, "Economics is the study of mankind in the ordinary business of life" - it implies that in everyday life people usually seek material wellbeing.

Thus, this definition identifies economics as the study of everyday activity of human beings and seeks to explain how well being is attained from material consumption. This definition is narrow as it talks only about material consumption or material wellbeing; yet it is important as it keeps human wellbeing at the centre of human activity.

Definition of Economics by Lionel Robbins : Any field of science deals with a problem question and economics deals with the question, "how to allocate limited resources which have alternative uses in the satisfaction of recurring and unlimited human wants in order to increase the wellbeing in a society"?

Hence in 1931, Lionel Robbins in his book, "Nature and Significance of Economics" gave the following definition, "Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses".

Human wants are unlimited and most wants keep on recurring. On the other hand, resources which help in satisfying human wants are limited and have alternative uses. Hence, economics must deal with the problem of allocation of scarce resources in the satisfaction of human wants to the maximum possible extent.

According to Robbins, economics is a positive science and does not prescribe 'how things should be'. It studies, 'how human beings behave' and does not deal with 'how they should ideally behave'. Hence economics does not deal with norms and thus is not a normative science.

Definition of Economics by Paul Samuelson : In his book 'Foundations of Economic Analysis' published in 1947, Samuelson defines, "Economics is the study of how people and society end up choosing, with or without the use of money, to employ scarce productive resources that could have alternative uses to produce various commodities over time and distributing them for consumption, now or in the future, among various persons in the society. It analyses costs and benefits of improving patterns of resource allocation". Hence Samuelson talks about choice, allocation of scarce resources and evaluation of costs and benefits of doing so.

All definitions in a way commonly point out that economics studies human behaviour, is positive in nature, adopts scientific methods and methodologies and thus it is a social science.

1.4 Economic Activity and Non-Economic Activity

Most human beings perform several activities during a day. They meet friends, spend time in shops, engage in political discussions, watch television and films and do much more. But all activities are not the subject matter of economics. Economics studies only economic activities. Hence it is important to understand the meaning of economic activities.

Meaning of Economic Activity : Activity performed with the purpose of getting economic benefits in the form of incomes; involving exchange of goods, services and/or factors as well as involving costs is called economic activity. Important aspects about an economic activity pertain to purpose of making economic gains, satisfaction of some want and; involvement of exchange and cost.

Examples of economic activities :

- (1) Eating in a restaurant (satisfy need by incurring expense).
- (2) Watching a movie in a theatre (incur expense to get entertainment).
- (3) Work in one's own farm (to exert labour and get output).
- (4) Get employed in a school to teach (provide service and get a salary).

Thus human requirements are plenty. Activity for fulfilment of a requirement through a transaction which involves costs and benefits on both sides is called an economic activity. Farmers, lawyers, teachers, actors, governments – all perform economic activities.

The following chain of activity is another example, to clarify the meaning of economic activity. A farmer needs a motorcycle. In order to earn income to pay for the motorcycle, she works in her farm and sells the output for money; the seller of motorcycle who earns money by selling the motorcycle spends it to fulfil some other want.

Meaning of Non-Economic Activity : Activity which is performed without the specific purpose of obtaining economic gains is called non-economic activity. It does not involve exchange of benefits on both sides of the transaction. For example, charitable activity or activities which are done out of love, affection, compassion etc. These activities involve costs but these costs are not incurred to get monetary/economic benefits in exchange.

1.5 Microeconomics and Macroeconomics

Economic analysis is done to study individual economic units as well as to study the economy as a whole. Hence for the purpose of analysis, the entire study of economics is classified into : (1) Microeconomics and (2) Macroeconomics.

Microeconomics is the study/analysis of individual units of the economy. It studies the rational behaviour of individual units.

Microeconomics studies the behaviour of individual units of the economy and micro economic analysis uses the principle of ‘marginalism’ to analyse how individual units make decisions.

The unit of demand analysis is the consumer, that of supply analysis is the firm, and that of labour market is labour. And according to state examples, subject of price determination of a product in a market, equilibrium output level for a firm, marginal productivity and wage determination of labour as a factor of production; are studied in microeconomics.

Microeconomic has set scientific principles showing behaviour of individual units.

Microeconomic studies issues which emerge from the entire economic set up and impact the entire economic set up. For example, determination of national income, unemployment, poverty, growth rate and demographic profile of population are topics studied under macroeconomics.

Macroeconomic analysis has helped to give principles for resource management to increase national income, reduce unemployment, poverty, inflation and so on.

However, the behaviour of individual economic units impact the macro economic parameters and the macroeconomic parameters impact the decisions of individual economic units.

1.6 Presentation of Information (Data) in Economics

In economic analysis or in a study of economics, information can be presented in the following three ways:

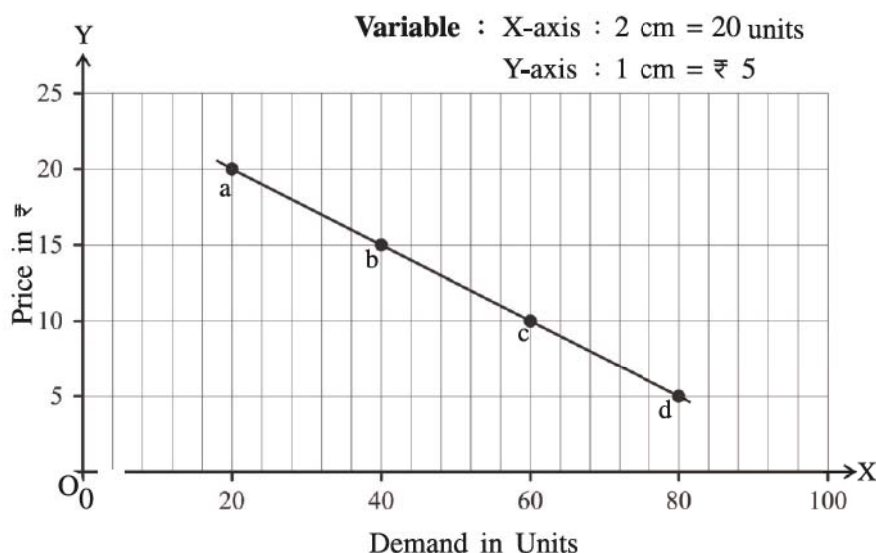
(1) Descriptive manner (2) By the way of data tables (3) By the way of graphs (diagrams)

For instance, the description of relation between price of a commodity and its demand is stated as, “when price of a commodity falls, its demand expands and vice-versa”.

This can be shown merely by presenting a data table showing a consumer’s willingness to demand a commodity at different prices of the commodity. This is shown below :

Price of the Commodity (₹)	Demand for the Commodity by Individual (in units)
20	20
15	40
10	60
5	80

Thus, the table also represents the same fact that as price of a commodity falls, its demand expands.



The curve in diagram 1.1 is a representation of the data given in the table above given in page 4 in the form of a graph. This curve slopes downward from left to right showing that when variable on 'Y' axis (which is price of the commodity in ₹) falls, the variable on 'X' axis (which is demand for the commodity in units) extends. Economics studies relationship between various economic parameters and hence a cause-effect relationship can be expressed by way of such graphs/diagrams.

1.1 Representation of Data in Diagram

1.7 Importance of Statistical Information

The importance of statistical information in economics can be stated as under:

1.7.1 Statistical Information Supports or Confirms a Principle : Philosophy of economics observes human behaviour and scientific tools in economics establish principles and theories. To test the validity of such theories in real life at different times and places, information from real life activity at such different times and places is necessary. Such information can be collected and presented in quantitative terms with the help of statistical tools. For example, statistical data on rainfall and agricultural production in a region at one time or at different times helps to understand the cause – effect relationship between rainfall and agricultural production which economic theory has already established. Likewise, data on price of a commodity and its demand can help to confirm the theoretical relationship established by economics between the two.

1.7.2 Gives an Idea about the Changing Trends of Economic Parameters : With the help of economic data we can obtain an idea of the direction and magnitude of change in economic parameters.

For example, we can know how sales revenue of a particular firm is changing; or we can know the trends of employment in a nation; or we can know the trends of production in different sectors of an economy. For instance, we can say that share of agricultural is falling in national income or supply of money is rising in the economy.

Such data help individual units to make appropriate decisions to increase their benefits and help the government in making appropriate economic policies.

1.7.3 To Make Comparative Study Easy : If appropriate statistical data are obtained then comparison of a parameter over different time periods, across regions and across nations can be made.

For example, we can compare growth rate of India's national income between 1951 and 2015; we can also compare India's macroeconomic parameters like per capita income, inflation etc. with those of other countries like USA, UK, China etc.

1.7.4 To Make Precise Presentation of Facts : Sometimes facts about economic parameters can be represented more clearly with the help of statistical data and graphs. Graphs showing inflation, agricultural production, regional disparities in incomes etc. can give clearer picture of their trends as compared to what description in words can do. Thus, it can be easily understood by lay persons.

1.8 Some Requisite Aspects in Collecting Statistical Information and Presenting it in Diagram/Graph/Chart

Statistical information can be represented in the form of a diagram/chart/graph. These are helpful in explaining some economic principles, trends and relationships in a simple and suggestive manner. Such a representation also becomes attention catching.

While constructing such diagrams the following particulars must be carefully considered.

1.8.1 Sources of Information/Data : The sources of data must be reliable and universally acceptable to ensure their accuracy.

For instance, to obtain information regarding growth and development parameters in India, 'Economic Survey of India' and data provided by Central Statistical Organization is a reliable source.

To obtain comparative data for such parameters for different countries of the world, 'World Development Report' is a reliable and universally acceptable source.

1.8.2 Clarity Regarding Dependent and Independent Variable : When there is a cause – effect relationship between variables then the cause variable is treated as an independent variable and the effect variable is treated as a dependent variable as its values are dependent on the values of the independent variable. In such relationships, data pertaining to the independent variable must be represented on the 'X' axis and that pertaining to the dependent variable must be represented on the 'Y' axis.

For instance, if we are examining the relationship between rainfall and agricultural production in a region, then rainfall is the independent variable and represented on 'X' axis and agricultural production is the dependent variable and therefore represented on the 'Y' axis.

If we are examining production over different time periods then time periods are represented on 'X' axis and production on 'Y' axis.

In economics in the law of demand however, price which is an independent variable is represented on the 'Y' axis and demand which is a dependent variable is represented on 'X' axis.

1.8.3 Selecting Appropriate Scales : In order to obtain a systematic graph with clarity and appropriate size, proper scales must be taken on both the axis. Scales are measures taken to represent actual data in a diagram. If actual data is too large, say in '000 or in '00,000 then such data cannot be directly represented in charts. Hence it is represented after converting it into measures on an appropriate scale.

For example, in a diagram, a distance of 1 cm. = 10,000 units or 1 cm. = 5 years and so on.

Such scales are taken on both the axes.

1.9 Presenting Quantitative/Numerical Information in Diagrams/Graphs

Numerical data can be represented in different types of graphs and diagrams.

Diagrams showing linear and non-linear relations are commonly used in economics. The demand curve is one such diagram.

Some other types of charts/graphs/diagrams used frequently in economics are,

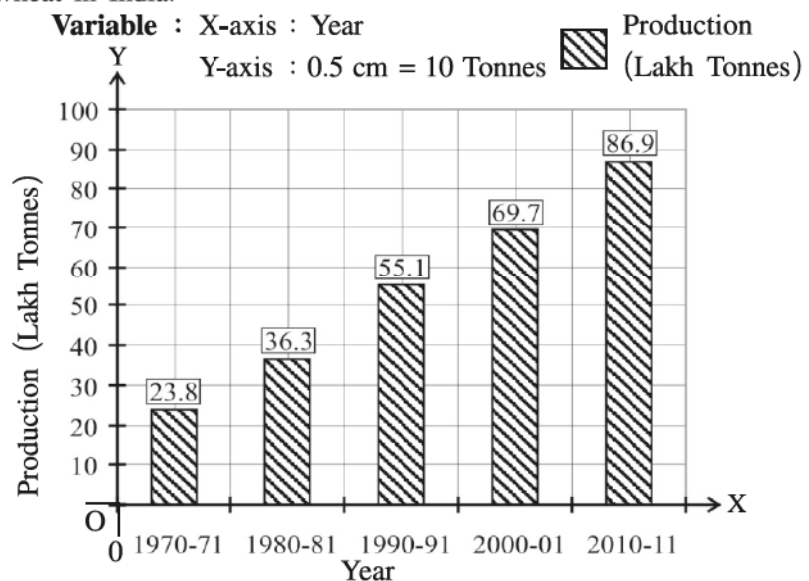
(1) Bar diagram (2) Grouped bar Diagram (3) Pie Diagram etc.

1.9.1 Bar Diagram : A bar diagram (also known as bar chart or bar graph) is a diagram which represents grouped data with rectangular bars with length proportional to the values which they represent.

For example, Production of wheat in India.

Wheat Production in India

Year	Production (Lakh Tonnes)
1970-71	23.8
1980-81	36.3
1990-91	55.1
2000-01	69.7
2010-11	86.9



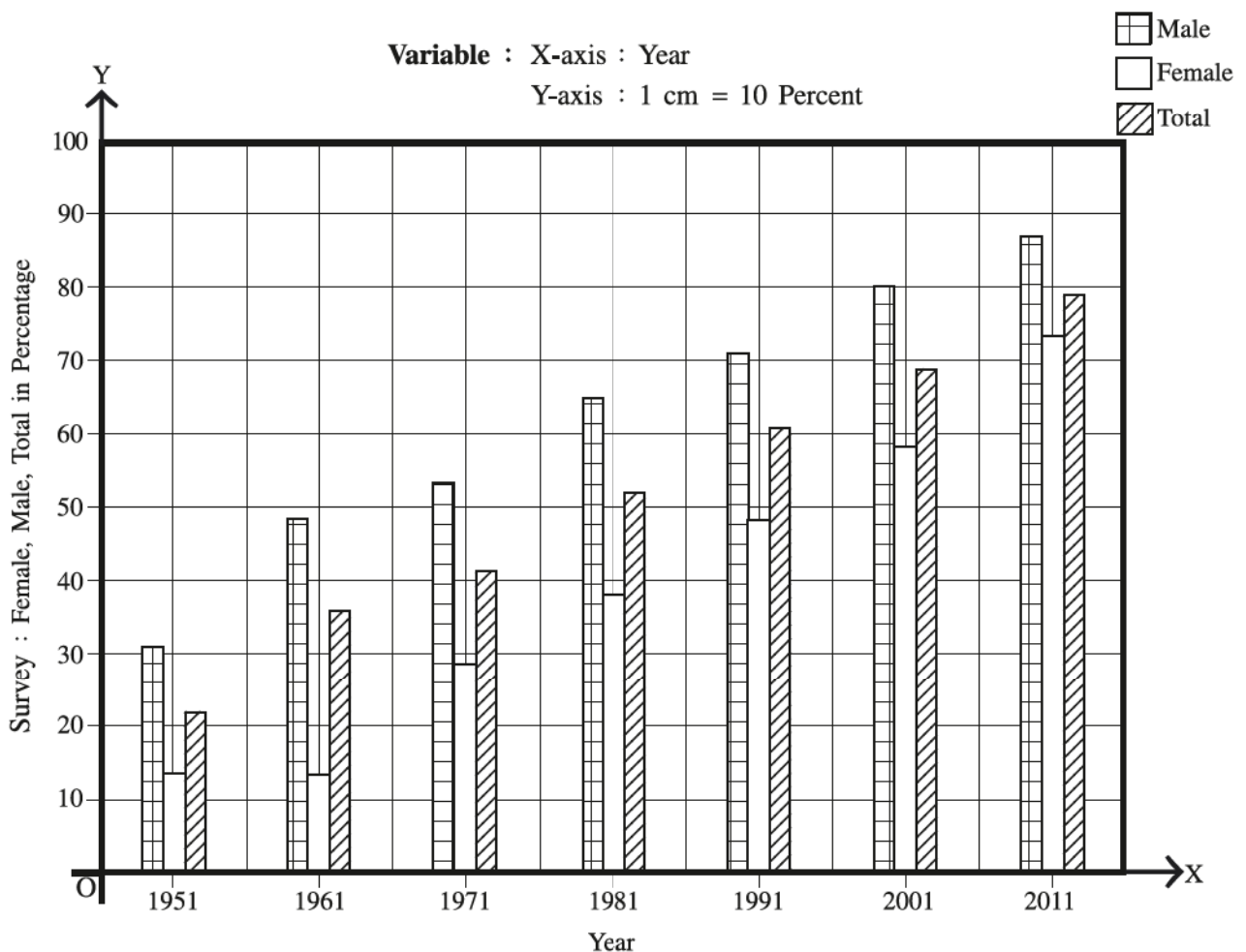
1.2 Representation of Data in a Bar Graph

1.9.2 Grouped/Clustered Bar Diagram : These charts are used when the dependent variable is grouped in more than one category. For example, when we want to examine the literacy rates for different years in Gujarat, we can use a grouped bar chart to show male, female and total literacy rates as three categories in one group for one year. Bar for each category can be shaded or coloured differently.

Literacy Rate in Gujarat (in Percentage)

Years	Male	Female	Total
1951	30.17	12.79	21.09
1961	48.73	12.77	36.19
1971	53.78	29.00	41.84
1981	65.10	38.50	52.20
1991	73.13	48.64	61.29
2001	80.50	58.60	69.14
2011	87.23	70.73	79.31

Source : Socio-Economic Survey of Gujarat: 2011-12

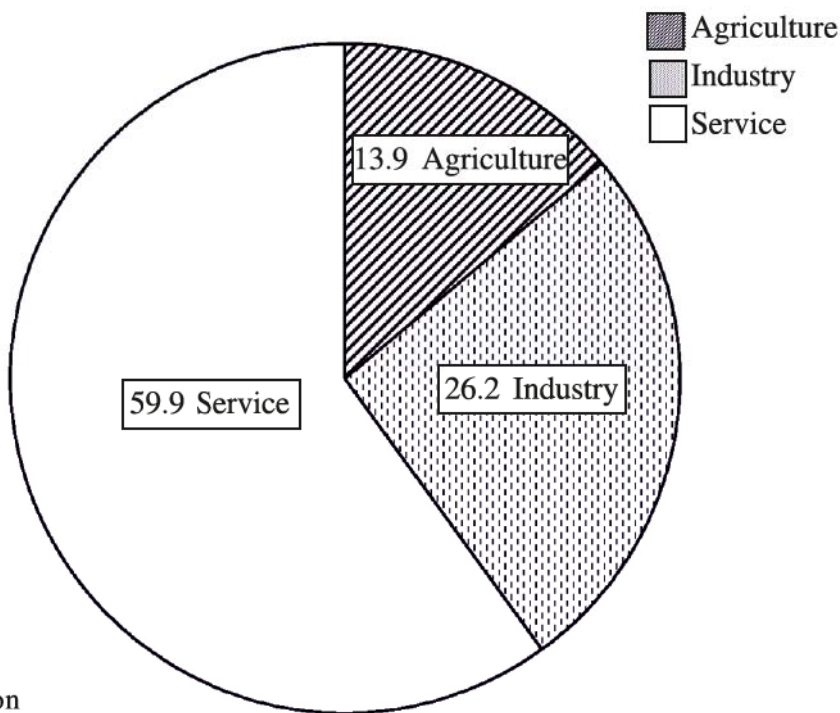


1.3 Representation of Data in a Grouped/Clustered Bar Graph

1.9.3 Pie Diagram : A pie chart is a circular statistical graph which is divided into sectors to illustrate the numerical proportion of data. The numerical data is proportionately converted into degrees in a circle and sectors are formed considering those degrees. For example, the share of different sectors in India's national income can be shown in a pie chart. .

Sector	Share in NI in Percentage
Agriculture	13.9
Industry	26.2
Service	59.9

Thus, numerical information can be explained in a simple manner with the help of graphs.



Source : Economic Survey of India : 2014-15

1.10 Importance of Economics

In a modern world almost all goods of human needs have become economic goods owing to increasing use and scarcity and thus all activities of human beings are increasingly becoming economic activities. Hence, the relevance of economics as a philosophy as well as a science is increasing in human life. Economics is important to understand, behaviour of human beings, society and state while managing every day activities and scientific theories and principles guiding professional decision making.

1.10.1 Understanding Everyday Behaviour : It is useful in understanding everyday behaviour of human beings, society and state while managing routine tasks. Economics helps in understanding everyday behaviour in the following ways :

1.10.1.1 Understanding International Events : Some international events affect lives of people in several countries like USA, Russia, China etc. People try to understand the impact of rise in price of crude oil in international market on their own cost of living; people also try to understand why some countries are more developed and others are less developed. Thus, in modern times with increasing information available to public owing to continuously improving technology, the scope of economics in everyday life is expanding.

1.10.1.2 Understanding Historical Events Knowledge of economics helps to understand historical events better. Economics helps to understand better the reasons behind wars, the entry of East India Company in India for trade and the resultant 'British raj', India's revolt against goods made in England during British rule, labour movements etc.

1.10.2 Economic Importance :

1.10.2.1 Decision Making by Individuals : People from all walks of life like households, lawyers, actors, singers and others try to get maximum gains from the efforts which they make; they try to manage their time and resources in an optimum manner to increase their gains. In a way, they all indulge in economic decision making knowingly or unknowingly.

1.10.2.2 Understanding Government Policies : To understand various policies of a state like tax policy, wage policy and so on, knowledge of economics is useful. People take decision according to the bank rates declared by the Reserve Bank of India. (REPO Rates and Reverse REPO Rates guide decision making regarding saving and investment.

1.4 Representation of Numerical Data in a Pie Diagram

1.10.3 Professional Decision Making : Economics is useful in knowing scientific principles and theories which guide professional decision making. Revenue and cost as well as demand and supply are concepts which are used in all types of economic activities. Certain theories of economics help businesses in day to day decisions pertaining to price determination, wage determination, employment of various factors of production and so on. Economics provides knowledge regarding the impact of certain decisions. For example, it provides insights into question like, what happens if price is reduced in a market with very high degree of competition.

Economics is a science which provides insights for day to day decision making. All human beings play role/s as a (1) consumer (2) producer or (3) labour from time to time in life. Economics helps them to take rational decisions for maximizing gains by minimizing costs.

Exercise

1. Choose correct option for the following from the options provided :

- (1) What is the science which studies human behaviour and deals with economic problems called ?
 (A) Philosophy (B) Physics (C) Economics (D) Statistics
- (2) From which Greek word is economics derived ?
 (A) Oikonomikos (B) Ecology (C) PHILO (D) NOMOS
- (3) Who is known to be the first economist to have started studying economics as a separate science ?
 (A) Kautilya (B) Marshall (C) Robbins (D) Adam Smith
- (4) Who introduced economics as a real science ?
 (A) Adam Smith (B) Robbins (C) Samuelson (D) Marshall
- (5) In how many branches is economics classified by the method of study and analysis ?
 (A) four (B) three (C) two (D) five
- (6) On which axis are the independent variables like countries, year, rainfall etc. usually represented ?
 (A) Vertical axis (B) Horizontal axis
 (C) On the point of origin (D) On the corner of the graph
- (7) Who has written the book 'Principles of Economics' ?
 (A) Adam Smith (B) Marshall (C) Robbins (D) Samuelson

2. Answer the following questions in one sentence :

- (1) State the definition of economics given by Robbins.
- (2) Which is the focus point of Samuelson's definition of economics ?
- (3) Which are the three ways of representing economic information ?
- (4) On which axis are the independent and dependent variables usually represented ?
- (5) What is pie diagram ?

3. Answer the following questions in short :

- (1) Give Kautilya's definition of economics.
- (2) Explain Marshall's definition of economics.
- (3) Explain the difference between economic and non – economic activities.
- (4) Specify the difference between microeconomics and macroeconomics.
- (5) "Statistical information is necessary to know the direction and condition of growth of an economy" explain.

4. Answer the following questions in brief points :

- (1) Explain the definitions of economics by Adam Smith and Marshall.
- (2) Give the points of importance of statistical information in the study of economics.
- (3) Give an idea regarding Indian economic thought.
- (4) Clarify the importance of economics.

5. Answer the following questions in detail :

- (1) Give an idea of the development of economics as a science in the west.
- (2) 'Graphs/diagrams are a better method of precisely presenting economic information.' Explain.

Glossary

Economic Activity

Activity for fulfilment of a requirement through a transaction which involves costs and benefits on both sides is called an economic activity.

Microeconomics

Microeconomics is the study/analysis of behaviour of individual units of the economy.

Macroeconomics

Macroeconomics studies issues which emerge from the entire economic set-up and impact the entire economic set-up.

Pie Chart (Diagram)

A pie chart is a circular statistical graph which is divided into sector to illustrate the numerical proportion of data. The numerical data is proportionately converted into degrees in a circle and slices are formed considering those degrees.

Analysis

Process of identifying, classifying information and understanding relationship between various parameters given in the information is called analysis.

Exchange

It is an activity of transaction which involves give and take.

Scientific Method

A method of analysis which uses facts, scientific tools and tries to establish scientific relationships based on proofs is called scientific method.

Specialisation

It is a method of working where a piece of work is done by some units of a factor of production or by a worker or by a group of workers who specialize only in that particular job.

Positive Method

A science which uses only observable and experimental facts to analyse reality.

Normative Science

: A science which prescribes what should be done and what should not be done. It judges behaviour, activities and actions as good or bad based upon some ideal benchmarks for a society.



2

Fundamental Concepts and Terminologies

● Introduction	2.5.4 Wealth Constitutes Goods which are Capable of Exchange
2.1 Price and Value	2.5.5 Durability
2.1.1 Use-Value	2.6 Types of Wealth
2.1.2 Exchange-Value	2.6.1 Individual Wealth and Social Wealth
2.1.3 Relationship between Use-value and Exchange-value	2.6.2 National Wealth and International Wealth
2.2 Goods and Services	2.7 Welfare
2.3 Types of Goods	2.7.1 Relationship between Wealth and Welfare
2.3.1 Physical (Tangible) and Intangible Goods	2.8 Factors of Production
2.3.2 Non-economic Goods and Economic Goods	2.8.1 Land
2.3.3 Durable Goods and Perishable Goods	2.8.2 Labour
2.3.4 Private Goods and Public Goods	2.8.3 Capital
2.3.5 Consumers' Goods and Producers' Goods	2.8.4 Entrepreneur
2.4 Wealth and Welfare	2.9 Trade Cycle
2.5 Meaning and Characteristics of Wealth	2.9.1 Irregular Changes
- Meaning	2.9.2 Seasonal Changes
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Introduction

Economics studies the rational behaviour of human beings. In the context of rationality, activities conducted are called economic activities and in order to begin the study of economics as a science, it is necessary and helpful to get clarity about some frequently used concepts and basic terminologies of economics.

This chapter provides a clear understanding of (1) goods, services and factors (2) concepts of and difference between price and value (3) wealth and welfare (4) trade cycle.

2.1 Price and Value

In everyday language, we use the words 'price' and 'value' alternatively to denote the same meaning. For instance, we make statements like, "this good is expensive", "this good is valuable", "this good has a high price". When these statements are made they are made without drawing a difference between price and value.

In economics, the concepts of price and value are different and it is necessary to first understand the concept of value. Value can be understood from two viewpoints. (1) from viewpoint of use; called use-value (2) from viewpoint of exchange; called exchange value.

2.1.1 Use-Value : The use-value is determined by the usefulness of a commodity to a consumer for her/his various needs. For example, food, water, sunlight etc. have a high use-value for all people in general.

2.1.2 Exchange-Value : When a commodity/service is exchanged for another commodity/service then the worth of one unit of this commodity is measured in terms of the amount of other commodity which it can exchange for. Such worth is called exchange-value. For example, if 1 kg of wheat exchanges for 1 kg of rice then the exchange value of one kg wheat is 1 kg of rice.

2.1.3 Relationship between Use-Value and Exchange-Value : If a commodity has high use-value then it is not necessarily said to have a high exchange-value. But if a commodity has high exchange-value then it surely has some use value. Exchange value is determined by the scarcity of a resource in relation to its need/use (scarcity of supply in relation to its demand). Goods are demanded if they have some use value. And, if they are scarce in supply in relation to their demand or their supply (flow in the market) is controlled by a few people then they have a higher exchange value. For example, precious metals, diamonds etc. On the other hand, if goods are highly useful but have unlimited supply then they do not have exchange value or may have very low exchange value. For example, though air and sunlight have very high usefulness for life, they have no exchange-value as they are abundant in supply. In earlier times, even water was a good with high use-value but no exchange value. However, in present times, the availability of water is reducing in relation to its need and use by people and so it has started commanding an exchange-value.

In economics, use of the word value is usually in context of exchange-value of a commodity with another commodity.

Thus, value means the worth of one unit of a commodity in terms of units of another commodity in exchange.

Price : If a commodity is exchanged for money then such monetary exchange value is termed as 'price'.

Price means the exchange value (worth) of a commodity measured in terms of units of currency.

2.2 Goods and Services

Goods : Commodities which have physical existence are called goods. In economics they are meant to satisfy the needs of consumption.

Services : Commodities which are intangible or do not have a physical existence are called services. In economics they are meant to satisfy the needs of human life.

Economics studies activities pertaining to production, consumption and distribution of goods or services. The nature of goods and services is different though both are important in economics.

Food is a good (commodity) but cooking is a service. Units of goods or stock of goods can be measured cardinally. Services generally cannot be measured in cardinal (quantitative/numerical) terms. However, the time spent after providing a service can be measured. The impact of a service in satisfaction of human wants is also abstract. For example, the need for knowledge and curiosity is satisfied by the service of education. However the exact contribution of the service of education in knowledge creation is abstract. However a book is a good and it may be possible to tell about the amount of information obtained from the book.

2.3 Types of Goods

The various goods and services in economics can be classified as,

2.3.1 Physical (Tangible) Goods and Intangible Goods : Some goods have physical existence like, ball, bat, television, refrigerator, stove, mobile phone and so on. These can be measured. Whereas, some goods do not have physical existence, cannot be measured cardinally and those are called services. For example, education, medical consultancy, rendition of music, cooking and so on.

2.3.2 Non-economic Goods and Economic Goods : Goods which do not command exchange value are called non-economic goods. They are abundant in supply and do not go through the economic process of production and distribution, though they are consumed by people. For example, sunlight, air and so on.

Goods which command an exchange value in the market are called economic goods. They command an exchange value as they are scarce in supply in relation to their demand and their supply can be held under control.

2.3.3 Durable Goods and Perishable Goods : Goods which come to the market can be durable or perishable.

Durable goods can be used for a long period of time and repeatedly. For example, shoes, clothes, television, and refrigerator and so on. Perishable goods cannot last for a long time and are consumable only once. For example, milk, fruits and so on.

2.3.4 Private Goods and Public Goods : Goods are classified as private goods and public goods based on their ownership and nature of use.

Private goods are goods which can be possessed and owned by a private individual; she/he takes all decision regarding these goods. These goods possess the characteristics of excludability and competitiveness. Excludability means, once a good is owned and being used by one individual, another individual cannot possess and use it at the same time. And, individuals have to compete for the ownership of these goods. For example, a packet of biscuit purchased by one child in a market which has competition among buyers; comes under the ownership of this child, and another child is excluded from having the same packet of biscuit. The individual who pays a price gets the good and others cannot have the same unit. For example, one who does not pay price for a mobile phone, does not get it.

On the contrary, public goods can be used by many individuals at the same time. They possess the characteristics of joint demand and collective consumption. Such goods are jointly demanded by many people. If one individual uses it the other cannot be excluded from its use and in this way they are collectively consumed. Hence these are called public goods. They are either provided for by the government for all or some people pay for it together. For example, a public garden or the garden of a housing society.

In short, private goods are owned and used by private individuals and public goods are owned by the government or group of people and are used collectively.

2.3.5 Consumers' Goods and Producers' Goods : Goods can satisfy human wants directly or indirectly. When a consumer consumes a good and this good is capable of satisfying a particular want directly then it is called a consumer good. These goods have passed the final stage of production. For example, cooked food. They satisfy human wants directly.

When a good is used at the intermediate stage of production of a final good, when it is purchased by a producer to produce a final good, when it is not directly consumed by the consumers but this good helps in the production of a final good then such a good is called a producer's good. For example, cotton used to make cloth, machines used in factories to produce garments, a tractor which facilitates in producing food grains, a utensil used to cook food etc. They satisfy human wants through the final good and not directly.

2.4 Wealth and Welfare

The concepts of wealth and welfare frequently appear in economic discussions and are very important in economics and hence must be clearly understood at this stage.

2.5 Meaning and Characteristics of Wealth

Since the time when Adam Smith gave the definition of economics in the context of wealth, the subject of wealth became extremely important in economics.

Meaning : In the understanding of Alfred Marshall's idea, wealth is something which is useful, scarce, capable of getting exchanged, and can be owned by somebody.

Characteristics : The following characteristics can be derived about wealth:

2.5.1 It should Possess the Characteristic of Usefulness : It must be useful in satisfying human

wants or needs. Therefore, goods which are useful in satisfying needs of human beings are wealth. For example, house, vehicle, precious jewellery etc.

2.5.2 It should be Scarce : Those commodities which are scarce in supply in relation to their demand and possess exchange-value besides being useful are called wealth. Goods which are useful but not scarce and do not have exchange-value like sunlight and air are not called wealth in economics.

2.5.3 It should have Physical or Intellectual Existence : Wealth should have an existence which can be exchanged.

The ability to understand, the aptitudes of human beings, their physical abilities etc. are the innate abilities and assets of human beings and are usually not exchanged.

In today's world, however, the intellectual abilities of human beings like the ability to create new ideas are exchanged for money in the market and hence the intellectual ability to create novel ideas and goods is called wealth.

Yet, the ability of a scientist to think is her quality and not wealth but the novel idea created by the scientist is wealth.

2.5.4 Wealth Constitutes Goods which are Capable of Exchange : Wealth is an economic concept and therefore must be capable of getting exchanged. Wealth is meant to satisfy present as well as future consumption and other needs and therefore must be capable of exchange. A house purchased today satisfies the present need of housing and can be sold in future to buy other goods. Precious metals, land etc. also possess this characteristic.

2.5.5 Durability : Wealth must possess durability. Durable goods can be used for future exchange and for satisfying future needs and therefore become wealth. Goods which perish after single use cannot be used for future transactions and are therefore not wealth. For example, land, house, precious jewellery are durable goods and hence can be considered wealth along with their other characteristics. Shares are also wealth.

Food grains which are produced by a farmer are not wealth if they perish in a very short time. Likewise labour of a labourer is also not called wealth. However, if food grains can be stored in cold storage for a long time and their market value increases in future then those become wealth. Hence new technology can redefine wealth.

2.6 Types of Wealth

Wealth can be classified as (1) Individual Wealth and Societal Wealth (2) National Wealth and International Wealth

2.6.1 Individual Wealth and Social Wealth : Wealth under the ownership of an individual and meant for private consumption is called individual wealth. For example, a house. Wealth under the ownership of society and meant for collective consumption is called societal wealth. For example, Dam.

2.6.2 National Wealth and International Wealth : Wealth belonging to a nation and possessed and treasured by a nation is called national wealth. It helps to generate exchange value directly or indirectly for a nation For example, rivers, mountains, literature and scriptures etc. International wealth is that wealth which is not owned by one nation but belongs to the whole world and can be shared by several nations.

2.7 Welfare

Welfare means enhancement of life situations, standard of living; an overall state of improvement.

The concept of welfare is used by all philosophies from spiritual sciences to economics.

All human activities, economic and non-economic are ultimately done with the purpose of improvement of life. Welfare can be measured quantitatively in the context of growth and qualitatively in the context of development.

In economics, subject of welfare can be studied as (1) individual welfare (2) collective welfare.

When an individual seeks to make efforts to improve her/his standard of living and wellbeing, it becomes a subject of individual welfare.

When nations and governments seek to improve growth, development etc. it becomes a subject matter of collective welfare.

2.7.1 Relationship between Wealth and Welfare : Generally when wealth increases, welfare increases as more wealth means higher capacity to generate monetary value, greater power to exchange goods or purchasing power for the owner and hence greater wellbeing. This is largely true in case of individuals.

But when the wealth of a nation increases in the form of national income, the welfare of people will increase only if this national income is equitably distributed among all sections of the society and among all sectors. Besides, a nation's welfare also depends upon social and cultural formation and hence there is not always a direct relation between wealth and welfare in a society.

2.8 Factors of Production

The activity of conversion of raw materials and resources into final goods which satisfy human wants is called production. By converting the nature of resources, their utility increases. Hence production can also be called a process which increases utility of resources. For example, when wood is converted into chairs which are demanded by customers for satisfaction of their wants then the utility of wood increases and this process of conversion is called production.

Now, the agents which help in such a process of conversion or production are called 'Factors of Production'.

There are Four Factors of Production, Viz. Land, Labour, Capital and Entrepreneur :

All these factors are equally important in the process of production. In a system of just distribution of income, the total income generated from various activities is distributed to each factor of production as per their productivity or their contribution in generating that income.

According to Alfred Marshall, there are two basic categories of factors of production (1) Nature (2) Human beings.

2.8.1 Land : In a general understanding, land may mean the surface of earth liveable for mankind. However, in economics, the concept of land is more inclusive. According to Marshall, all natural assets which help in production or economic activities constitute land. That is, climate of a particular part of earth, water resources, fertility, mineral resources all of these constitute land.

Hence land can be said to have the following characteristics:

- (1) Land is a gift of nature and is not manmade.
- (2) The total supply of land is fixed.
- (3) Land is geographically immobile.
- (4) All types of land are different in fertility, climatic conditions and so on.
- (5) The remuneration of land as a factor of production is called 'rent'.

2.8.2 Labour : Physical or intellectual work by humans in order to earn returns which is done under the supervision by some authority is called labour.

The characteristics of labour are:

- (1) Labour cannot be separated from the labourer.
- (2) Labour cannot be stored. In a way labour (effort done by a labourer) is perishable.
- (3) The mobility of labour is influenced by social and economic reasons.
- (4) The efficiency of every labourer is different (which means the capacity of every labourer to perform labour is different).
- (5) The supply of labour depends upon population.
- (6) The remuneration for labour is called 'wages'.

2.8.3 Capital : In modern times, capital is considered to be a highly important factor of production. All manmade goods which help in production constitute capital. It is different from land and labour as it is a 'produced' factor of production. In other words, it is a manmade factor of production. For example, a tractor is a produced factor of production which further helps in the production of agricultural goods.

There is a difference between capital and wealth. Though several times some goods are factors of production as well as wealth; it is not so always. A good may be a capital good as it helps in production but it may not possess all characteristics of wealth. Or another good may be wealth but not a factor of production.

Characteristics of capital can be stated as:

- (1) Capital is a manmade factor of production.
- (2) It is the most mobile of all factors of production.
- (3) The increasing demand for capital in present times owing to increasing capital intensive methods of production has resulted in increasing scarcity of this factor.
- (4) The remuneration of capital is called 'interest'.

2.8.4 Entrepreneur : Entrepreneur is the factor which brings together (coordinates) all other factors of production for the production process (for an economic activity). There is a difference between management and co-ordination. Management of work is done by a manager who is a salaried labourer (employee) of the entrepreneur. Entrepreneur is the person who sets up the enterprise.

Entrepreneur is the risk taker who takes the risk of setting up an activity. This factor does not get fixed return but tries to generate income by running the economic activity successfully. She may incur a loss if the activity does not function well.

Characteristics of enterprise can be stated as:

- (1) This factor is the decision maker of the activity.
- (2) This factor is known as the risk taking factor.
- (3) It possesses the quality of co-ordination. In other words, 'entrepreneurship' is a quality.
- (4) The remuneration of this factor is called profit.

2.9 Trade Cycle

Economic activities go through phases of dynamic changes like a human life goes through changes. Such changes are basically of four types :

(1) Irregular changes (2) Seasonal changes (3) Long run regular trend (4) Long run dynamic changes which are cyclical in nature.

2.9.1 Irregular Changes : These are accidental changes which occur in an economic activity. e.g. floods, famines, storms, fire and so on. Such accidents impact an economic activity in the short run and sometimes in the long run.

These changes may generally occur and/or have their impact in some sectors or some regions of an economy only. For example, only in the agricultural sector or only in the industrial sector.

2.9.2 Seasonal Changes : These changes regularly occur in economic activities with changing seasons. For instance, demand for certain goods changes by seasons and accordingly production and employment may change.

2.9.3 Long Run Regular Changes : Some changes occur in a given direction in the form of a trend. These are directional changes which occur in an activity. For example, some regular sales trends.

2.9.4 Cyclical Changes : Dynamic fluctuations arising in an economy over its long run growth

leading to rise (upward swing) in growth of economic activities and fall (downward swing) are called trade cycles. The rise and fall in economic activity is cyclical in nature.

Such changes occur in economic activities and growth process of economies also goes through these changes and the study of these dynamic changes called 'trade cycles' is very important in economics.

2.10 Definitions of a Trade Cycle

According to Heberler, "Trade Cycle is an interval that embraces alternating periods of prosperity (good time) and depression (bad time)."

According to Hawtrey, "Trade cycles are continuous phases of good and bad changes occurring in the economy."

Characteristics of a Trade Cycle :

- (1) They depict dynamic changes in the economy
- (2) They depict the positive and negative changes in the economy.
- (3) These arise because of several factors.
- (4) Trade cycles have various phases and each phase does not last for a uniform period.

2.11 Phases of a Trade Cycle

A trade cycle has the following four phases: (1) Boom/Inflation (2) Recession (3) Depression (4) Recovery

2.11.1 Boom : This is a period when economic activity reaches the maximum growth level in a given time period. Demands have peaked and so have incomes and profits. Thus, this period is also called 'peak'.

2.11.2 Recession : This period follows the period of boom. When economic activity peaks in a given period and investments and employment have reached the highest possible levels, a slow down occurs. Demand slows down, investment and employment follow.

2.11.3 Depression : The slowdown in the recession phase continues to cause a depression when all activities reach a minimum level under those circumstances. The confidence of buyers, producers and investors in the economic activity is at its lowest. In the phase of recession consumers start expecting further fall in prices and reduce demand in expectation of further price fall. With the fall in demand, production falls and employment falls causing further reduction in the demand. Thus a depression is caused.

2.11.4 Recovery : When depression lasts for some time, the suppressed demand starts emerging, Governments may try to boost investments and employment and certain times technological changes happen in the long run. This leads to a recovery of demand, employment and investment.

These types of cycles occur in all economies and all economic activities in the long run. However, in market oriented economies, these occur more openly while they may be suppressed by the state in the state controlled economies.

Exercise

1. Choose correct option for the following from the options provided :

- (1) Which value expresses the importance of a good in human life ?
(A) Exchange-value (B) Use-value (C) Consumption-value (D) Internal-value
- (2) What is the monetary payment in exchange of a good called ?
(A) Value (B) Exchange (C) Price (D) Wealth
- (3) Which of the following is a physical good ?
(A) Music (B) Education (C) Doctor's advice (D) Refrigerator

- (4) Which of the following is not a characteristic of wealth ?
 (A) Possesses usefulness (B) Should be available in abundance
 (C) Has an explicit existence (D) Is capable of being exchanged
- (5) Which of the following signifies all forms of 'natural wealth' ?
 (A) Capital (B) Labour (C) Land (D) Money
- (6) Which is not a type of trade cycle ?
 (A) Irregular changes (B) Seasonal changes
 (C) Short run regular changes (D) Long run regular changes

2. Answer the following questions in one sentence :

- (1) State the meaning of value.
- (2) Give meaning and example of commodities which are universally and abundantly available.
- (3) What is meant by perishable goods in economics ?
- (4) Give the meaning and example of consumer goods.
- (5) What is meant by individual wealth?
- (6) Give the meaning of factors of production.
- (7) Give the meaning of wealth.
- (8) Give the definition of trade cycle given by Heberler.
- (9) How many phases are there in a trade cycle ? Which are those ?

3. Answer the following questions in short :

- (1) Give two points of difference between private goods and public goods.
- (2) Explain the meaning of commodities and services with examples.
- (3) Give the meaning of durable goods with examples.
- (4) Which goods are called consumer goods in economics ?
- (5) Give the meaning of individual wealth and social wealth.
- (6) Give the meaning of wealth given by Prof. Marshall.
- (7) Explain the meaning of production.
- (8) State the meaning of labour as a factor of production.

4. Answer the following questions in brief points :

- (1) Give the meaning of price and value.
- (2) Give the types of goods and explain the difference between consumer goods and producers' goods with examples.
- (3) Give the types of wealth and explain the difference between national wealth and international wealth with examples.
- (4) Give the meaning of factors of production with examples.
- (5) Give the meaning of trade cycle and explain the various phases of a trade cycle.

5. Answer the following questions in detail :

- (1) Give the meaning and explain the characteristics of wealth in detail.
- (2) Give a detailed explanation of the phases of a trade cycle.
- (3) Define production and discuss factors of production.

Glossary

Price	:	If a commodity is exchanged for money then the monetary exchange value is termed as 'price'. In other words, price means the exchange value (worth) of a commodity measured in terms of units of currency units.
Value	:	Thus, Value means the worth of one unit of a commodity in terms of units of another commodity in exchange.
Goods	:	Commodities which have physical existence and are meant to satisfy the needs of consumption are called goods in economics.
Wealth	:	Wealth is something which is useful, scarce, capable of getting exchanged, and can be owned by somebody is called wealth. It gives higher capacity to generate monetary value, greater power to exchange goods or purchasing power for the owner and hence greater wellbeing.
Services	:	Commodities which are intangible or do not have a physical existence and are meant to satisfy various needs of human life are called services in economics.
Factors of Production	:	These are agents which help in the economic activities of production, distribution, trade etc.
Trade Cycle	:	Dynamic fluctuations arising in an economy over its long run growth leading to rise (upward swing) in growth of economic activities and fall (downward swing) are called trade cycles. The rise and fall in economic activity is cyclical in nature.
Welfare	:	Welfare means enhancement in the quality of life situations, standard of living; an overall state of improvement.



3

Demand

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Introduction

Demand and supply are very important concepts among basic concepts of economics. A person can not have analytical power without explanation of demand and supply in economics. Therefore, explanation of two market forces called demand and supply is necessary. Here, we will study the concept of demand.

3.1 Meaning

Demand is the quantity of a commodity which a buyer desires, is able and willing to buy at a given price at a given point of time.

Demand is thus determined by five factors, namely, desire, willingness to buy, ability to buy, a particular price and a particular point of time. All these five factors are essential to define demand.

3.2 Factors Affecting Demand/Determinants of Demand

The determinants of demand for commodity/service can be classified as :

(1) Price of that commodity/service (2) Factors other than price (Other determinants).

3.2.1 Price of a Commodity/Service : Price of the concerned good is the most important determinant of its demand. When price of a good falls, a rational consumer will buy more, i. e. demand expands and when price falls a rational consumer will buy less, i. e. demand contracts.

3.2.2 Other Determinants :

3.2.2.1 Tastes and Preferences of a Consumer : To a considerable extent, demand depends upon tastes and preferences of a consumer. These are associated with her/he likes and dislikes. If a person is fond of reading, her/his preference for reading will change with age. e.g. at a young age, a person prefers to read story books, at adolescence may prefer to read novels and in old age may prefer to read spiritual books.

3.2.2.2 Income of a Consumer : The demand for a commodity increases with increase in the consumer's income. When income of a consumer falls, her/his demand for a good falls. Thus, there is a direct relationship between income and demand. However, there are some goods known as inferior goods in economics, whose demand decreases with increase in income. Thus, these goods are exceptions to the direct relationship between income and demand.

3.2.2.3 Prices of Related Goods : Normally related goods are : (1) substitute goods (2) complementary goods. The demand for a particular goods in the market depends upon the prices and availability of its related goods, namely, substitute goods and complementary goods.

(I) Price of Substitute Goods : Substitute goods are those goods which can be easily used in place of one another. Such goods have similar characteristics. They can be used alternatively in the satisfaction of a want. In other words, substitute goods are severly competing goods. e.g. very closely competing brands of televisions, motorcycles, refrigerators etc. substitute one another. If the price of a substitute good falls then the consumer may choose to replace her/his current brand with the substitute which has become cheaper. Hence, demand for a good falls when price of its substitute falls.

(II) Price of Complementary Goods : Complementary goods are goods which are consumed togethe. One good cannot be consumed without the other. In other words, these must be consumed jointly to satisfy a want/need. For example,. mobile phone and simcard, air conditioner and electricity, spectacle frame and spectacle glasses etc. If the price of a complementary good rises then the demand for the original good falls and vice-versa. Since these goods are jointly consumed, price rise in even one of these goods makes the joint consumption expensive and so the consumer demands lesser of both and vice-versa.

3.2.2.4 Expectations about Future Prices : An individual's expectation about the future price of a good affects her/his current demand for that good. If the consumer expects the price of a good to rise in the future, her/his demand for this food increases in the current period and vice-versa.

3.2.2.5 Size and Demographic Profile of Population : The size as well as demographic profile of population impact the total market demand for a good. If total population is large then total market demand will be more and vice-versa like-wise if greater population belongs to a particular age-group then the demand for certain goods in the market will be more.

3.3 Demand Function

The cause effect relationship between variables can be expressed in a functional notation. Demand function specifies a functional (mathematical) relationship between demand for a good and the determinants of this demand. It represents that demand for a good is dependent on many factors like price of the good, tastes and preferences of a consumer, income of the consumer, prices of related goods etc. Market demand also depends upon size of the population. Demand function can be shown as under.

Where, $D_x = f(P_x, P_y, P_e, T, Y, U)$

D_x = Demand for commodity X

f = Functional Notation

P_x = Price of commodity X

P_y = Price of related commodity Y

P_e = Expectations Regarding Future Prices

T = Tastes and Preferences of the consumer

Y = Consumer's Income

U = Other Factors

Economics studies the relationship between price and demand for various purposes. In the law of demand, the relationship between price and demand for a good is studied by assuming all other demand determinants as given.

3.4 Law of Demand

The principle explaining the relationship between price and demand for a good keeping the effect of all other determinants as constant is called the 'law of Demand'. In this law, price is the cause variable and demand is the effect variable.

This law was presented by prof. Alfred Marshall and it expresses an inverse relationship between price and demand stating that, "When other factors influencing demand remain unchanged, if price of a good falls, its demand expands and if price of a good rises, its demand contracts."

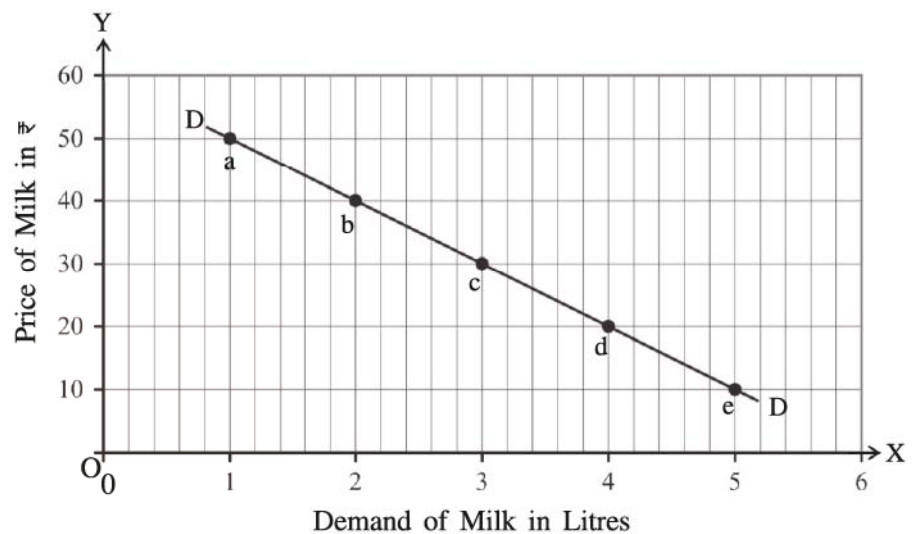
3.4.1 Assumptions of Law of Demand : The inverse relationship between price and demand of a good, as expressed by the law of demand is based upon certain assumptions.

- (1) Tastes and preferences of the consumer remain unchanged.
- (2) Income of consumer remains unchanged.
- (3) Price of substitute and complementary goods remain unchanged.
- (4) Consumers do not make anticipation regarding future prices.
- (5) Size of population remains the same.

3.4.2 Explanation of Law of Demand : We can explain law of demand with the help of the schedule, diagram and reasoning provided below :

Demand Schedule : The schedule showing willingness of a consumer to buy different quantities a good at various prices is called the demand schedule. The following schedule is an abstract (imaginary) example of a demand schedule.

Price of Milk in ₹	Demand of Milk (in Litres)
50	1
40	2
30	3
20	4
10	5



3.1 Diagram for Law of Demand

The above diagram shows price of milk on 'Y'-axis and demand for milk on 'X'-axis. By plotting the demand given in the schedule at various prices, we obtain the various points 'a', 'b', 'c', 'd', 'e' which show the various price-demand combinations. By joining these points, we get the demand curve 'DD' which slopes downward from left to right indicating the inverse relationship between price and demand.

At point 'a', price of milk is ₹ 50 and demand is 1 litre. At Point 'b', price falls to ₹ 40 and so demand expands to 2 litres and accordingly at point 'e' when price falls as low as ₹ 10, demand expands to as high as 5 liters.

Analysis (Reason for inverse relationship between price and demand) : The inverse relationship between price and demand occurs because of two reasons which are explained below :

3.4.2.1 Income Effect : When the monetary income of the consumer remains constant, but price of the good falls then her/his real income rises. (real income is the purchasing power of money income). When real income rises, a consumer can buy more of a good and therefore its demand may rise. For example, if the amount of money at the disposal of the consumer is ₹ 50 and the price of milk is ₹ 50 per litre than the consumer can buy (demand) only 1 litre of milk. But, if the price of milk falls to ₹ 10, the consumer can now demand 5 litres of milk with money income of ₹ 50. Mostly, normal goods have a positive income effect. Inferior goods have a negative income effect. That is, when the price of inferior goods fall, the real income of the consumer increases but the demand for these goods falls. For example, coarse food grains.

3.4.2.2 Substitution Effect : When price of the concerned good falls, it becomes relatively cheaper than its substitutes. Hence, a consumer will reduce the consumption of substitute goods and expand the demand for the concerned good. This is substitution effect. For example, between two varieties of pants, namely, a pair of regular/cotton/terry-cotton pants and denim pants, if the price of regular pants falls and that of denim pants remains the same then the consumer finds the regular pants cheaper compared to the denim pants and will expand the demand for the regular pants. (coconut water and cold drinks.)

3.5 Exceptions to the Law of Demand

Exceptions to the law of demand means that, when price of a good falls, its demand contracts

instead of expanding and vice-versa. Thus, a price change creates demand to change in opposite direction than that indicated in the law of demand. Some exceptions to the law of demand are stated below :

3.5.1 Prestigious Goods : Certain goods which are priced very high and are generally consumed by very rich people like, expensive jewellery, expensive cars, expensive mobile phones etc. are exceptions to the law of demand. Such goods are used by the rich as status symbols and hence, even when there is a rise in their price, their demand expands instead of contracting. And, if their price falls, the rich may contract their demand thinking that a fall in price means that the good is losing its prestige.

3.5.2 Extremely Low-Priced Goods : Certain goods are extremely low-priced goods and hence, the entire consumption expenditure on such goods forms a very small proportion of the consumer's income. For example, pins, stapler pins etc. Even if their price rises, a consumer's demand for these goods may not contract and if their price falls, the consumer may not expand demand as she/he may not need more of such goods.

3.5.3 Giffen Goods : When price of certain goods called inferior goods fall and the real income of a consumer rises, she/he may reduce the consumption of such goods and substitute these by goods of a superior quality. These goods were named after Robert Giffen who made such observations and explained this idea. Such goods are necessary goods and are purchased by the low-income groups.

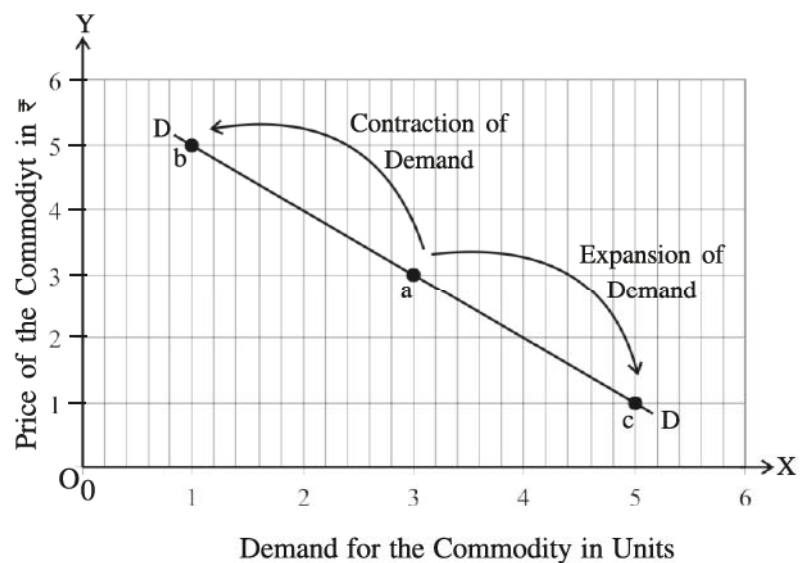
For example, A person with low income purchases Jowar or Bajra. When the price of Jowar/Bajra falls very low, the real income of the consumer tends to increase. Hence, she/he will reduce consumption of such goods and will purchase more of wheat, which is the superior good. Another example is that of vegetable (Vanaspati) Ghee and pure Ghee.

3.5.4 Special Preferences of People : Certain times, people get very accustomed and used to certain goods. As a result, if there is some rise in the price of such goods, an individual's demand may not decrease. For example, a particular brand of tooth paste, shoes etc.

3.6 Expansion and Contraction of Demand

When other determinants are assumed to remain constant and price is varied, there is expansion and contraction of demand. When prices falls keeping other determinants constant, there is an expansion in demand, accordingly when price rises when other determinants do not change then there is contraction of demand.

Price of the Commodity in ₹	Demand of the Commodity in Units	Note
5	1	Demand contracts due to rise in price
4	2	
3	3	
2	4	Demand expands due to fall in price
1	5	



3.2 Expansion and Contraction of Demand

In the above schedule, Suppose the initial price is ₹ 3 then the initial demand is 3 units. which is seen at point 'a' in the diagram. When price falls to ₹ 1, demand expands 5 units which is shown at point 'c' in the diagram. The movement from point 'a' to point 'c' on demand curve DD is called expansion of demand.

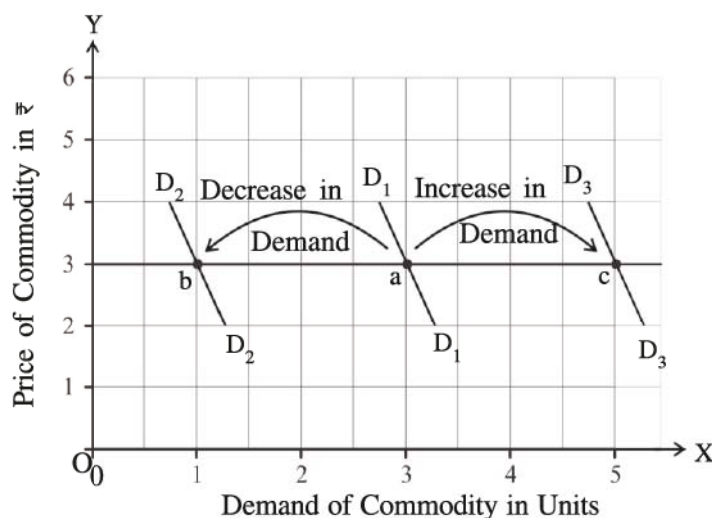
Now from the initial point 'a' if price rises from ₹ 3 to ₹ 5, demand contracts from 3 units to 1 unit which is shown at point 'b'. The movement from point 'a' to point 'b' on the same demand curve DD is called contraction of demand.

In a way expansion and contraction of demand occur on the same demand curve. Expansion is a downward movement on the demand curve and contraction is an upward movement on the demand curve.

3.7 Increase and Decrease in Demand

When one factor or some factors other than price change in favour of the demand of a good then there is an increase in demand which is caused by rightward shift of the demand curve. If these factors change against the demand then at the same price, demand decreases as the entire demand curve shifts to the left. Hence, increase and decrease in demand is caused by determinants other than price.

Price of the Commodity in ₹	Demand of the Commodity in Units	Note
3	1	Decrease in demand
3	2	
3	3	
3	4	Increase in demand
3	5	



3.3 Increase and Decrease in Demand

In the above schedule and diagram, initial demand curve is D_1D_1 where at price of ₹ 3 demand is 3 units. This is shown at point 'a' on D_1D_1 . When price remains constant at ₹ 3 but one or some of the other factors change in favour of demand then the demand curve shifts to the right to D_3D_3 where the demand increases to 5 units.

From the initial point 'a' on D_1D_1 , now, if one or some of the other factors change against demand then the demand curve shifts to the left to D_2D_2 and the demand decreases from 3 units to one unit. This is depicted at point 'b' on D_2D_2 .

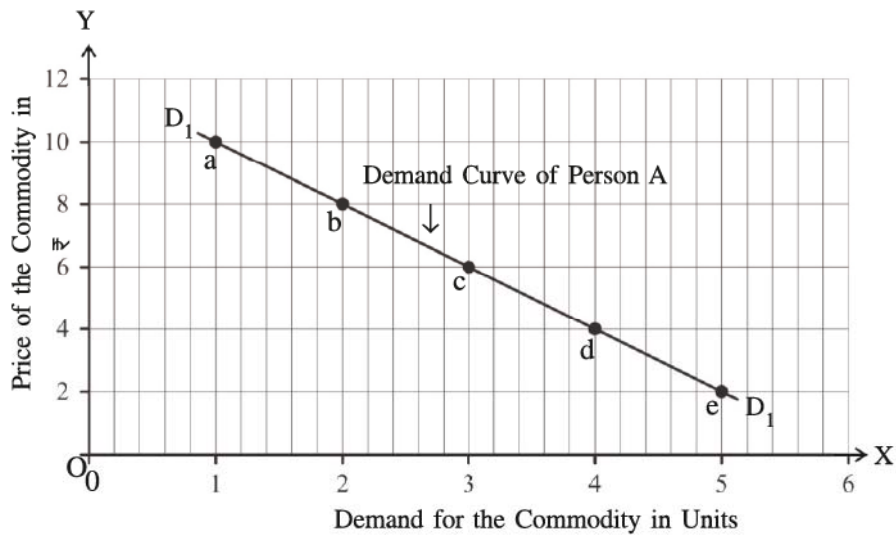
Thus, increase or decrease in demand is seen from a map of more than one demand curve. A rightward shift of the demand curve shows increase in demand and a leftward shift shows decrease in demand.

3.8 Individual Demand and Market Demand

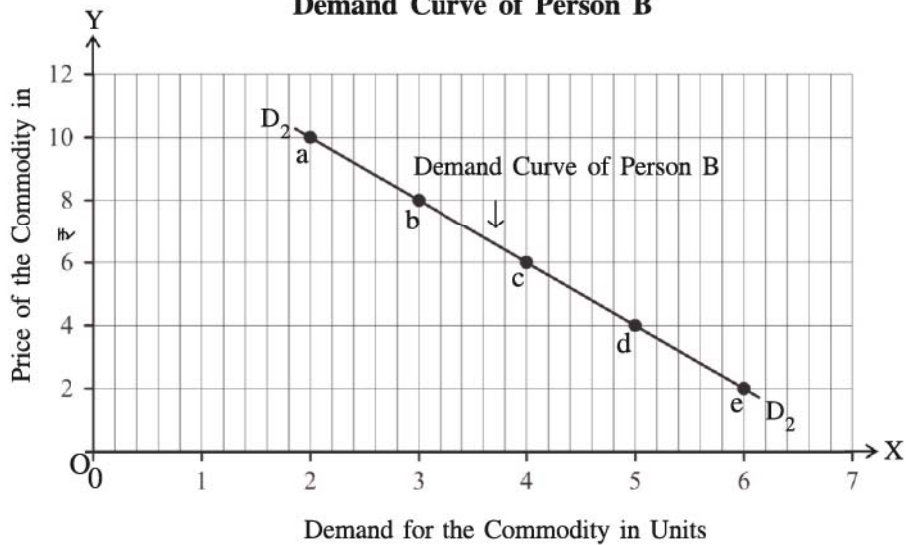
Demand in economics is also classified as individual demand and market demand. Individual demand is the demand of a good by an individual consumer at a given price at a particular point of time. The sum total of such individual demands of all existing consumers in the market is called market demand at a given price at a particular point of time.

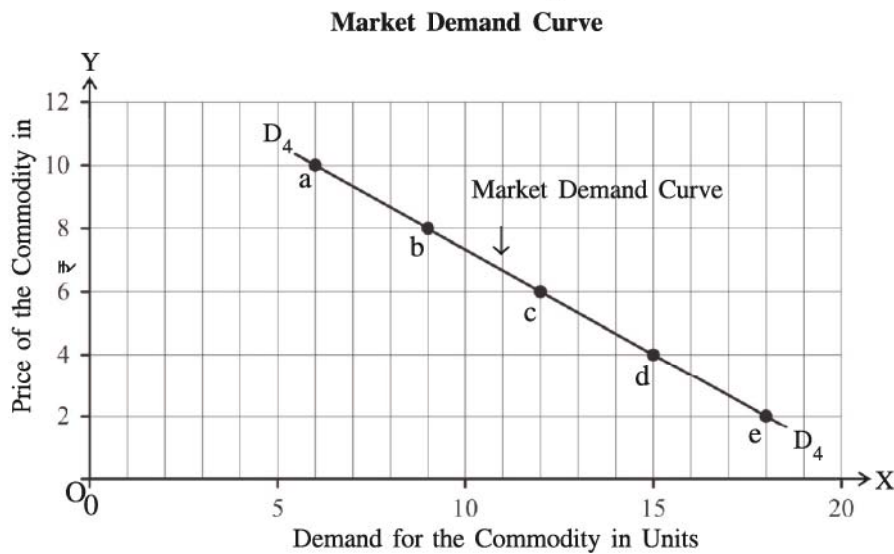
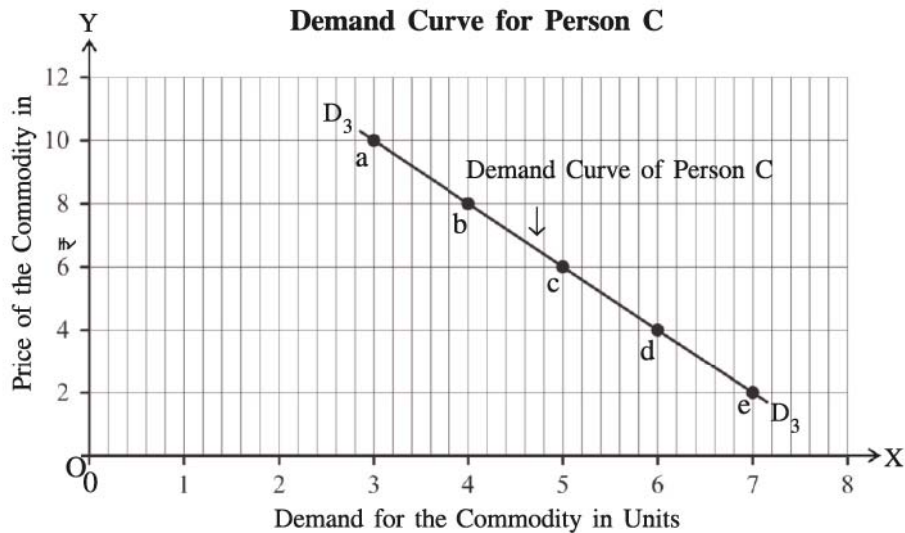
Price of the Commodity (in ₹)	Demand by Individual A (in Units)	Demand by Individual B (in Units)	Demand by Individual C (in Units)	Market Demand (Total of Demand by A, B and C) (in Units)
10	1	2	3	6
8	2	3	4	9
6	3	4	5	12
4	4	5	6	15
2	5	6	7	18

Demand Curve of Person A



Demand Curve of Person B





3.4 Individual Demand Curves and Market Demand Curve

The above schedule depicts the individual demands by consumers A, B, and C. The summation of individual demands is shown as market demand. The individual demand curves are shown as demand curve of A, demand curve of B and demand curve of C in separate diagrams above. And, the market demand curve is also shown in a separate diagram.

The above diagrams also depict that all the three individual demand curves of A, B and C consumers are downward sloping and so is the market demand curve.

3.9 Elasticity of Demand

Elasticity of demand is the extent to which demand responds to changes in any its determinants, like price, income, tastes and preference etc.

3.10 Price Elasticity of Demand

Law of demand explains that when other demand determinants are assumed to be constant, as price falls demand expands and as price rises demand contracts. But, it does not state by what proportion demand expands or contracts. The concept of price elasticity of demand explains this.

3.10.1 Meaning of Price Elasticity of Demand : Price elasticity of demand shows the proportion (extent) to which demand changes with a change in price. It can be expressed as :

$$\text{Price elasticity of demand} = \frac{\text{Proportionate change in demand}}{\text{Proportionate change in price}}$$

e.g. If a 1% fall in price of commodity 'X' leads to a 5% rise (expansion) in demand for 'X' then,

$$\begin{aligned} \epsilon_p &= \frac{\text{Percentage change in demand for X}}{\text{Percentage change in price of X}} && (\epsilon_p = \text{Price Elasticity of Demand}) \\ &= \frac{+5\%}{-1\%} \\ &= |5| \end{aligned}$$

Note : Price elasticity of demand is expressed as a pure number and is not associated with any unit of measurement (as percentage, rupees, kgs., litres, meters etc.)

Definition of Price Elasticity of Demand : The definition of price elasticity of demand given by Marshall is as under :

According to Marshall, the degree of elasticity of demand depends upon the extent of rise in demand because of a fall in price and upon the extent of fall in demand because of a rise in price.

3.11 Degrees of Price Elasticity of Demand

The extent of change in demand because of a change in price can be expressed in five degrees as under :

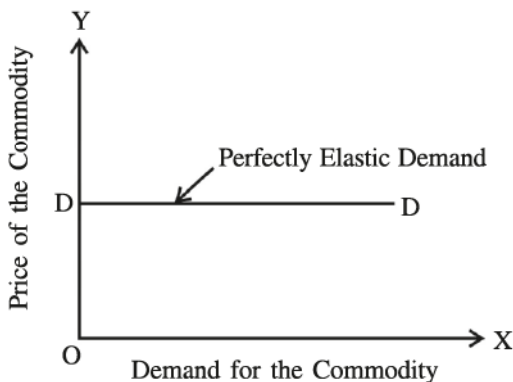
- | | |
|--|---|
| (1) Perfectly elastic demand ($\epsilon_p = \infty$) | (2) Perfectly inelastic demand ($\epsilon_p = 0$) |
| (3) Unitary elastic demand ($\epsilon_p = 1$) | (4) Relatively elastic demand ($\epsilon_p > 1$) |
| (5) Relatively inelastic demand ($\epsilon_p < 1$) | |

3.11.1 Perfectly Elastic Demand ($\epsilon_p = \infty$) : When there is an infinite change in demand for commodity 'T' because of a negligible change in its price (which may be as low as zero) then such a demand is called perfectly elastic demand and the elasticity of demand = ∞ .

By the formula,

$$\epsilon_p = \frac{\text{Proportionate change in demand}}{\text{Proportionate change in price}}$$

$$\frac{\infty}{1} = \infty \text{ (Infinite)}$$



Such elasticity of demand is not found in reality but, in the theory of economics, such demand is explained in a perfectly competitive market.

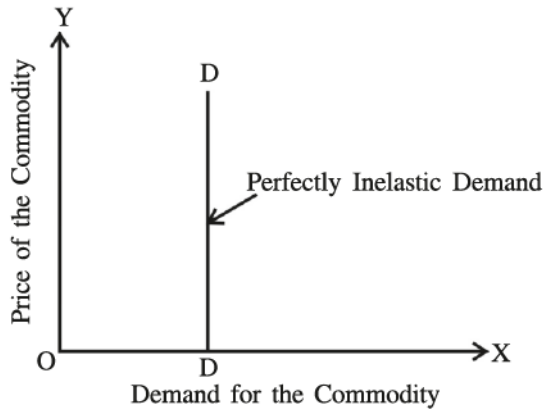
In the diagram the demand curve 'DD' is horizontal straight line parallel to X-axis and depicts infinite change in demand at the same price.

3.5 Perfectly Elastic Demand

3.11.2 Perfectly Inelastic Demand ($\epsilon_p = 0$) : When price of a commodity say commodity 'K' changes by any amount, say 10% but there is no change in its demand then such a demand is called perfectly inelastic demand.

By the formula,

$$\begin{aligned}\epsilon_p &= \frac{\text{Proportionate change in demand}}{\text{Proportionate change in price}} \\ &= \frac{0\%}{+10\%} = 0 \text{ (zero)}\end{aligned}$$



3.6 Perfectly Inelastic Demand

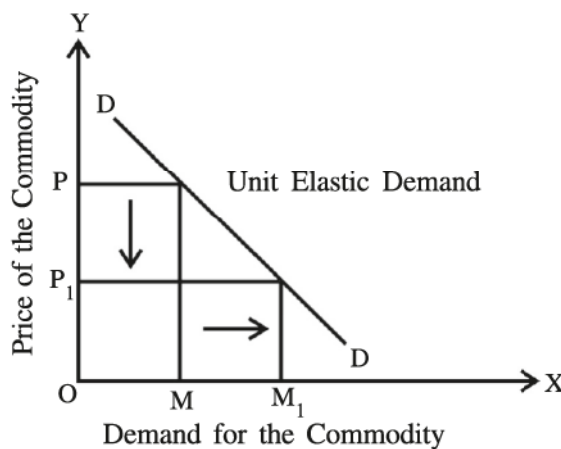
As shown in the diagram, 'DD' demand curve is a vertical straight line showing that whatever be the change in price, there is no change in demand. Such elasticity of demand is always zero.

3.11.3 Unitary Elastic Demand ($\epsilon_p = 1$) : When the percentage change in demand is proportionate to percentage change in price then it is called unitary elastic demand. For example, if price of commodity 'S' falls by 5% and its demand by 5%, then there is unitary change in demand.

By the formula,

$$\begin{aligned}\epsilon_p &= \frac{\text{Proportionate change in demand}}{\text{Proportionate change in price}} \\ &= \frac{+5\%}{-5\%} = |1|\end{aligned}$$

When proportionate change in demand and proportionate change in price are equal, then demand of a commodity is known as unitary elastic demand.



3.7 Unitary Elastic Demand

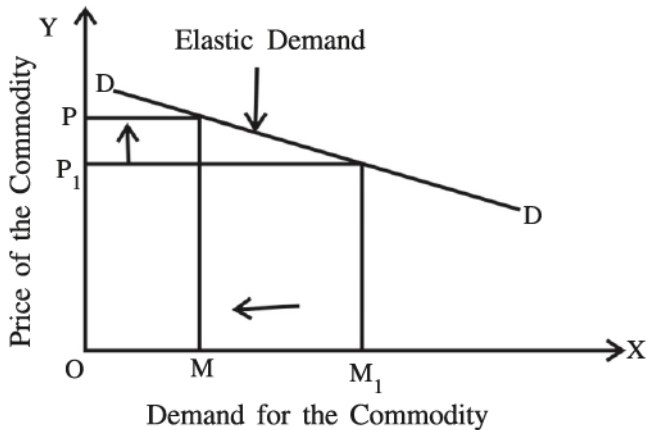
In the diagram, on the demand curve 'DD', when price falls by PP_1 amount, demand which expands by MM_1 is exactly same as price change.

3.11.4 Relatively Elastic Demand ($\epsilon_p > 1$) : When percentage change in demand is proportionately more than percentage change in price then such demand is called relatively elastic demand. For example, if price of commodity 'R' rises by 10 % and its demand falls by 30 %, then its demand is called elastic demand.

By the formula,

$$\begin{aligned}\epsilon_p &= \frac{\text{Proportionate change in demand}}{\text{Proportionate change in price}} \\ &= \frac{-30\%}{+10\%} = |3|\end{aligned}$$

This shows relatively elastic demand as the change is '3'.



In the diagram, on the demand curve 'DD', when price rises by PP_1 amount, demand falls by MM_1 amount which is proportionately greater than that of price. This type of elasticity is observed for luxury goods like televisions, cars etc.

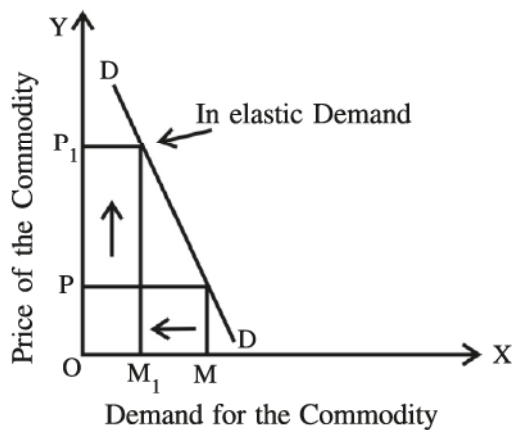
3.8 Relatively Elastic Demand

3.11.5 Relatively Inelastic Demand ($\epsilon_p < 1$) : When percentage change in demand is proportionately lesser than percentage change in price then such demand is called relatively inelastic demand. For example, when price of commodity 'G' rises by 20 % and as a result its demand falls only by 5 % then its demand is called relatively inelastic demand.

By the formula,

$$\begin{aligned}\epsilon_p &= \frac{\text{Proportionate change in demand}}{\text{Proportionate change in price}} \\ &= \frac{-5\%}{+20\%} = -\frac{1}{4} |0.25|\end{aligned}$$

When price elasticity is less than one, then that demand is called as inelastic demand of commodity.



In the diagram, on demand curve 'DD', when price rises by PP_1 amount, demand falls by MM_1 amount which is proportionately lesser than that of price. This type of elasticity is observed for necessary goods like food grains, milk, oil etc.

3.9 Relatively Inelastic Demand

3 12 Income Elasticity of Demand :

As price is the cause of change in demand in the concept of price elasticity of demand, income is the cause of change in demand in the concept of income elasticity of demand. It means income elasticity of demand is useful to measure changes in the demand for a commodity with respect to changes in the income of a consumer.

3 12.1 Meaning of Income Elasticity of Demand : It is the extent of change in demand for a good because of a change in income of the consumer. It can be expressed in formula as follows :

$$\text{Income elasticity } (\epsilon_y) = \frac{\text{Proportionate change of demand}}{\text{Proportionate change of income}}$$

3 13 Types/Degrees of Income Elasticity of Demand

There are three main types of income elasticity of demand, these are :

3 13.1 Positive Income Elastic Demand : When demand increases, due to a rise in income of the consumer or demand decreases due to a fall in income of the consumer, then such a change in demand is known as positive income elasticity of demand.

Infact, there are three degrees of in positive income elasticity of demand.

(A) Unit Income Elastic Demand ($\epsilon_y = 1$) When change of demand and change of income of consumer are proportionately equal, than it is known as unitary income elastic demand.

(B) Elasticity of Demand Greater than Unity ($\epsilon_y > 1$) When change in demand is proportionately greater than the change in income of the consumer then this type of income elasticity of demand is known to be greater than unity .

(C) Elasticity of Demand Less than Unity ($\epsilon_y < 1$) When change in demand is proportionately lesser than change in income of the consumer then this type of income elasticity of demand is known to be lesser than unity.

3 13.2 Negative Income Elastic Demand : With the rise in income of a consumer if demand decreases or with the fall of income of a consumer if demand increases then such elasticity of demand is known as negative income elasticity of demand. Normally, some types of inferior goods have negative income elasticity of demand. This concept was given by Robert Giffen and thus such goods are known as giffen goods. For example, Bajra, Kodari (coarse grain), coarse cloth, Palmolein oil, Vegetable ghee etc.

3 13.3 Zero Income Elastic Demand : With the change in income of consumer if demand of the good remains unchanged then such demand is known to have zero income elasticity of demand. Usually, this type of income elasticity can be found for low priced goods like salt, post card, pins, match sticks, stepler pins etc.

3 14 Cross-Price Elasticity of Demand

Any good in economic analysis can be studied or compared in context of its (1) substitute goods (2) complementary goods

Substitute Goods : Substitute goods means those goods which can be easily used in place of a given good for satisfying a want as they are very close alternatives of a given good.

Complementary Goods : Complementary goods are goods which are consumed together/jointly. One good cannot be consumed without the other. In other words, these must be consumed together to satisfy a given want.

When the demand of the concerned commodity changes in response to the change in price of its related good (substitute or complementary good) then the extent of such change in demand is called cross elasticity of demand.

$$\text{Cross elasticity of demand} = \frac{\text{Percentage change in demand for good X}}{\text{Percentage change in price for good Y}}$$

3.15 Methods of Measuring Elasticity of Demand

The law of demand expresses an inverse relationship between price and demand of a good but does not clearly specify the extent of change in demand supposing if there is a 10% change in price. This kind of specification is provided by the concept of elasticity of demand. There are various methods of measuring elasticity of demand. The commonly used methods are: (1) method of proportionate change (2) total outlay method (total expenditure method) (3) geometric method

Exercise

1. Choose correct option for the following from the options provided :

- (1) Factors affecting demand can be classified in to how many categories ?
 (A) One (B) Two (C) Three (D) Four
- (2) How is the demand curve sloped ?
 (A) Negative (B) Positive (C) Parallel to X axis (D) Parallel to Y axis
- (3) What is the other name for poor quality commodities ?
 (A) Prestigious Commodities (B) Very cheap commodities
 (C) Giffen commodities (D) Useless commodities
- (4) How many types of price elasticity of demand are there ?
 (A) Two (B) Four (C) Five (D) Seven
- (5) What is the relationship between price and demand ?
 (A) Positive (B) Negative (C) Equal (D) Zero
- (6) Which kind of commodities are called complementary commodities ?
 (A) Joint (B) Competitive (C) Not related (D) Alternative
- (7) What is the movement of demand curve when demand expands ?
 (A) Upward (B) Downward
 (C) Right side on another demand curve (D) Left side on another demand curve
- (8) Which one has no realtion with demand curve ?
 (A) Specific time (B) Specific price (C) Consumer (D) Supply
- (9) Who has presented law of demand ?
 (A) Adam Smith (B) Alfred Marshall (C) Robbins (D) Keynes
- (10) When products are expensive then how is the demand of prestigious goods of the rich ?
 (A) More (B) Less (C) Zero (D) Negative

2. Answer the following questions in one sentence :

- (1) What is demand ?
- (2) What is income elasticity of demand ?
- (3) What is cross elasticity of demand ?

- (4) When is there possibility of expansion - contraction of demand ?
- (5) In which situation does demand decrease or increase ?
- (6) Why is the law of demand called as conditional law ?

3. Answer the following questions in short :

- (1) What is demand function ?
- (2) What is substitution effect ?
- (3) What is meant by Giffen goods ?
- (4) What is individual demand ?
- (5) What is market demand ?
- (6) What is price elasticity of demand ?
- (7) Which commodities are called prestigious commodity ?
- (8) State the names of methods to measure price elasticity of demand.

4. Answer the following questions in brief points :

- (1) Define income effect and substitution effect.
- (2) Explain expansion and contraction of demand along with diagram.
- (3) Explain increase and decrease of demand and represent it diagrammatically.
- (4) Explain income elasticity of demand.
- (5) Explain the exceptions to the law of demand.

5. Answer the following questions in detail :

- (1) Explain individual demand and market demand along with diagrams.
- (2) Define demand and explain factors affecting demand.
- (3) Explain law of demand with the help of schedule and diagram.
- (4) Define price elasticity of demand and explain its types with diagrams.

Glossary

Demand	:	Demand is the quantity of a commodity which a buyer desires, is able and willing to buy at a given price and a given point of time.
Substitute Good	:	Substitute goods are those goods which can be easily used in place of one another. Such goods have similar characteristics. They can be used alternatively in the satisfaction of a want.
Complementary Good	:	Complementary goods are goods which are consumed together/jointly. One good cannot be consumed without the other. In other words, these must be consumed jointly to satisfy a given want.
Demand Curve	:	A curve which plots the quantity of a good demanded at various prices. It depicts the relationship between price and demand.
Expansion of Demand	:	When other demand determinants remain unchanged, the rise in demand of a good when its price falls is called expansion of demand.
Contraction of Demand	:	When other demand determinants remain unchanged, the fall in demand of a good when its price rises is called contraction of demand.
Demand Function	:	Demand function establishes a functional (mathematical) relationship between demand for a good and the various determinants of that demand.

Price Elasticity of Demand	Price elasticity of demand shows the proportion (extent) to which demand changes with a change in price.
Perfectly Elastic Demand	When there is an infinite change in demand because of a negligible change in price (which may be as low as zero) then such a demand is called perfectly elastic demand
Perfectly Inelastic Demand	When price changes by any amount but there is no change in demand then such a demand is called perfectly inelastic demand.
Substitution Effect	When price of the concerned good falls, it becomes relatively cheaper than its substitutes. Hence, a consumer will reduce the consumption of substitute goods and expand the demand for the concerned good. This is substitution effect.
Income Effect	When the monetary income of the consumer remains constant but price of the good falls then her/his real income rises. When real income rises a consumer can buy more of a good and demand rises. This is called income effect
Real Income	Real income is the purchasing power of money income. In other words, amount of goods which a given money income can buy is the real income.
Giffen Goods	Giffen goods are those goods whose demand falls when their price falls . These are a special type of inferior goods named after Robert Giffen.
Prestigious Goods	Goods consumed by the very rich people to enhance their social status and prestige, are called prestigious goods.Their demand is likely to remain unchanged or increase when their price rises.
Price Elasticity of Demand	A quantitative relationship between proportionate change of demand and proportionate change of price of commodity is known as price elasticity of demand.
Income Elasticity of Demand	It is the extent of responsiveness of demand to the change in the consumer's income.
Cross-Price Elasticity of Demand	When the demand of the concerned commodity changes in response to the change in price of its related good (substitute or complementary good) then the extent of such change in demand is called cross elasticity of demand.



- Introduction
- 4.1 Meaning of Stock and Supply
 - 4.1.1 Production
 - 4.1.2 Supply
 - 4.1.3 Stock
- 4.2 Difference between Stock and Supply
- 4.3 Factors Affecting Supply
 - 4.3.1 Price of the Product
 - 4.3.2 Factors other than Price (Other Factors)
 - 4.3.2.1 Price of Factors of Production
 - 4.3.2.2 Level of Technology
 - 4.3.2.3 Future Expectations Regarding Price
 - 4.3.2.4 Other Factors
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 - 4.9.2 Perishable Goods
- 4.10 Price Determination in the Market

Introduction

Demand and supply both are equally important determinants of price. In order to fully understand the concept of demand, it is necessary to understand the concept of supply.

Considering the demand for various goods in the market, it becomes a function of the market to ensure the supply of these goods. Supply must be altered in accordance to changes in demand. Just as there is a different demand at every price, there also is a corresponding supply to every price.

4 1 Meaning of Stock and Supply

In everyday language a distinction between supply and stock is not drawn. However, in economics there is a clear distinction between stock and supply.

4 1.1 Production : Production is the quantity of goods created by the available factors of production during a fixed time period.

4 1.2 Supply : It is that amount of production which a producer is able and willing to sell in the market at a given price and at a particular point of time.

4 1.3 Stock : Stock is the total available amount of goods with a producer which can be offered for sale in the market as per the ability and willingness of the seller. For example, a trader of oil in Rajkot has 500 packets of oil. If she/he is not able and willing to sell it in the market at a given price at a given point of time then supply is zero. But, if she/he is able and willing to sell 300 packets from the available amount then the supply of oil is 300 packets.

Before understanding the meaning of supply, it is important to clarify a few concepts.

(A) Willingness to Sell : The entire amount of a good available with a producer or trader is not called supply. It is a stock which will become supply only when she/he is able and willing to sell at a given price at a particular point of time.

(B) Ability to Sell : Ability to sell depends upon the availability of stock. For example, If the trader of oil desires to sell 1,000 packets of oil while she/he has an available stock of only 500 packets then the ability to sell is only 500 packets. Thus, supply is 500 packets.

(C) Willingness to Sell : Besides the ability to sell, the trader should be willing to sell a good at a given price at a particular point of time.

From the above discussion, it is clear that supply is that proportion of the total available stock which a supplier is able and willing to sell at a particular price at a particular point of time.

4.2 Difference between Stock and Supply

Generally the concepts of stock and supply are used synonymously by people. But, technically the two concepts are different. Stock is the sum total of the available amount of a good and supply is the stock which traders are able and willing to sell at a prevailing price at a particular point of time,

When the trader is not able and willing to sell the entire available stock at a given price and a point of time then supply will not be the same as stock.

From an available stock of 500 packets, if the trader is able and willing to sell 300 packets then the supply of oil is 300 packets. Hence the available stock which determines the ability to sell is called stock. While, the ability and willingness to sell at a given price at a particular point of time is the supply.

Hence, stock is the total amount of a product which is available for sale. Supply is less than stock when the supplier sells lesser amount from the available amount. Stock consists of current production as well as the unsold stocks from previous lot of production. Thus, stock is different from production and supply.

4.3 Factors Affecting Supply (Determinants of Supply)

Factors affecting supply are grouped under two categories : (1) Price of a good and (2) Factors other than price. Supply of commodity is affected by the following factors.

4.3.1 Price of the Product : Price is an important determinant of supply. A producer sells for profit and thus, she/he supplies more when the price of a product rises and supplies less when the price of a product falls. Thus, there is a positive relationship between price of a good and its supply.

4.3.2 Factors other than Price : (Other Factors)

4.3.2.1 Price of Factors of Production / Cost of production : Supply is affected by change in production cost. E.g. When rent paid to the owner of land, wages paid to the labourer, decrease, the cost of production decreases. When cost of production decreases, profits increase if price remains unchanged and hence the seller is willing to sell greater amounts. Hence, supply expands when prices of factors of production fall. While if cost of production rises, vice-versa happens, that is, supply contracts.

4.3.2.2 Level of Technology : When state of technology advances, time and efforts are saved. Hence, greater amounts and better quality of goods are produced with the same or lower costs. If market price does not fall then profits increase and sellers are willing to sell more; supply expands. Countries that use more advanced technologies are able to produce more at lower costs.

4.3.2.3 Future Expectations Regarding Price : Future expectations about price affects the current supply of goods. If sellers speculate price of a product to rise future then they will contract the supply in the present time period to build up stock for the future and vice-versa.

4.3.2.4 Other Factors : Supply increases when there is increase in number of firms producing the product, when political stability exists, natural conditions remain conducive, when efficient law and order mechanisms and legal systems exist, when industrial relations are maintained well between owners and workers of production and marketing activities etc. And, supply decreases when the above factors act against supply.

4 4 Individual Supply and Market Supply

Supply in economics is also classified as individual supply and market supply. Individual supply is the supply of a good by an individual firm/seller at a given price at a particular point of time. The sum total of such individual supplies of all existing sellers in the market is called market supply at a given price at a particular point of time.

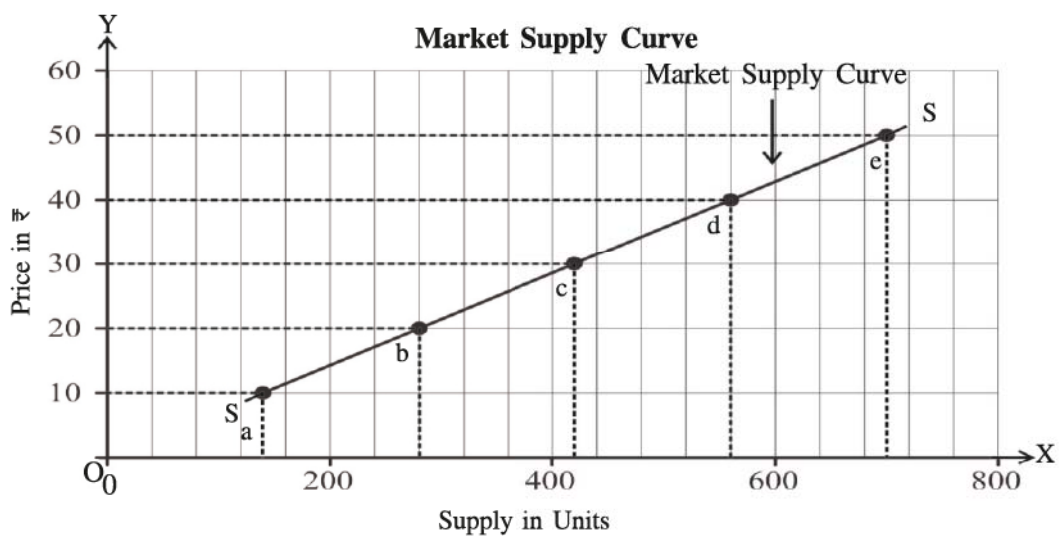
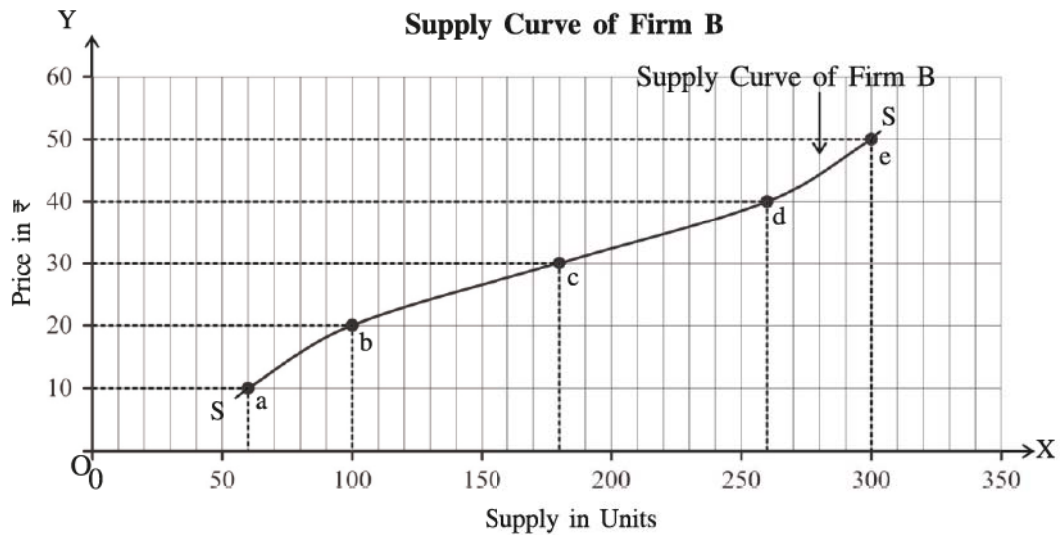
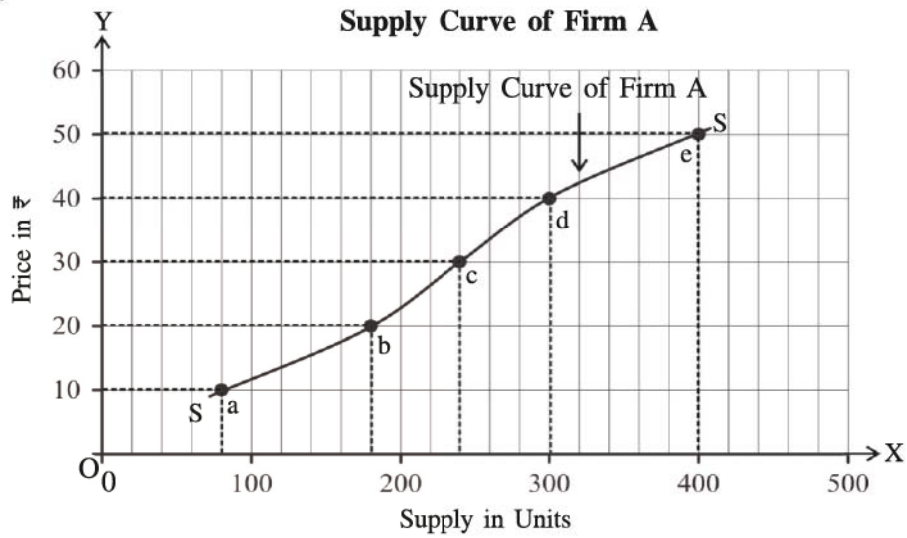
Price per kg in	Supply of Different Firms (in kg)		Market Supply (in kg)
-	Firm (A)	Firm (B)	Combined Supply of Firms A and B
10	80	60	140
20	180	100	280
30	240	180	420
40	300	260	560
50	400	300	700

The above schedule shows that when price is higher, supply is more and when prices is lower, supply is lesser. This is explain by a law, which is known as ‘Law of Supply’.

Explanation of Schedule/Diagrams : The above schedule shows individual supply schedules of firm A and firm B, while the sum total of supply of firm A and firm B is shown as market supply schedule.

Individual and market supply curves can be drawn from the above schedule. These curves have

a positive slope as there is a positive relationship between price and supply. The slope of each curve in the figures below is different though positive as there is a difference in the correspondence between price and supply in each case.



4.1 Diagrams for Individual and Market Supply Curves

4.5 Supply Function

Supply function specifies a functional (mathematical) relationship between supply of a good and its determinants.

It represents that the supply of one good is determined by many factors. In other words supply function is a mathematical representation of the relationship of supply of a good with its determinants.

$$S_x = f(P_x, T, P_F, P_e, U)$$

Here, S_x = Supply of X commodity

f = Functional Notation

P_x = Price of X commodity

T = Level of Technology

P_F = Factor Prices

P_e = Expectations Regarding Future Prices

U = Other Factors

4.6 Law of Supply

We understood that demand is always stated at a particular price. Supply is also stated at a particular price. “When all other factors affecting supply are assumed to be constant, as price increases, supply expands and as price decreases, supply contracts”. Thus, there is a positive relationship between price and supply and this relationship is called law of supply. Let us understand the assumptions of law of supply.

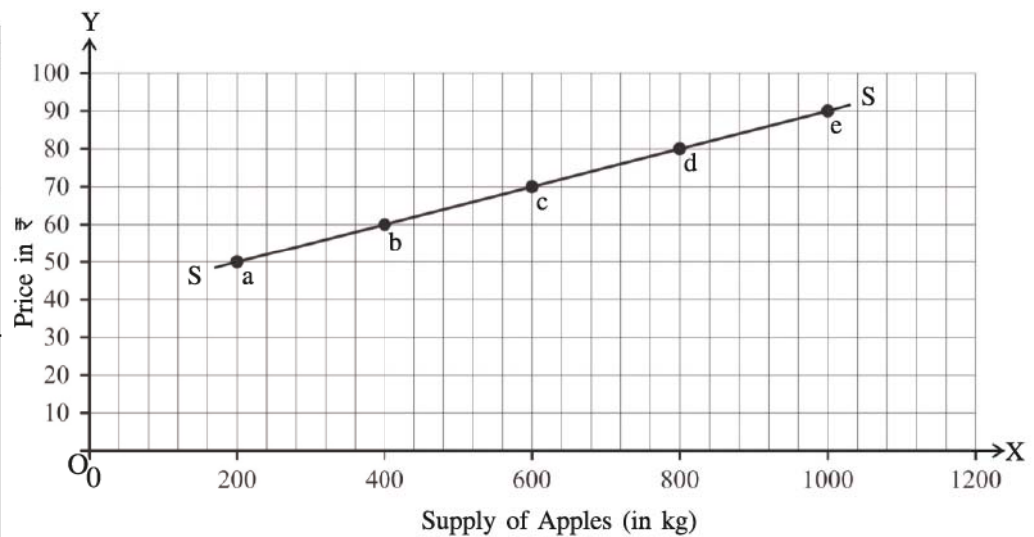
4.6.1 Assumptions of Law of Supply : Law of supply rests on certain assumptions. There are several factors affecting supply of a good at a particular point of time besides price. However, the law of supply assumes the effect of all factors other than price as constant on the supply at a given point of time. Actually, some of the other factors can have a more exerting influence on supply than price; however, we assume these to be constant. Some important assumptions of law of supply are:

- (1) Prices of factors of production remain constant.
- (2) There is no change in the prevalent state of technology.
- (3) Level of competition remains the same; in other words, number of sellers in the market remains the same.
- (4) Expectations regarding future prices are ignored/held constant.
- (5) Other factors like government policy, transport facilities, natural factors etc. remain constant.

4.6.2 Schedule, Diagram and Explanation of Supply : A schedule showing a seller’s willingness

to sell a good at various prices is called the supply schedule. The following table shows a hypothetical example showing the willingness of a seller to sell apples at different prices.

Price of Apples per kg in ₹	Supply of Apples in kg
50	200
60	400
70	600
80	800
90	1000



4.2 Diagram of Law of Supply

In the above diagram, price of apples is represented on 'Y' axis and supply of apples on 'X' axis. Plotting the graph of above table gives points a, b, c, d, e which show the various price-supply combinations.

When price is ₹. 50, supply is 200 kgs. When price rises to ₹ 60, supply extends to 400 kgs. and when price rises still further to ₹ 70, supply extends to 600 kgs. and so on. The curve SS is called the supply curve and it has a positive slope.

4.7 Relationship between Price and Supply

There are two reasons for positive relationship between price and supply :

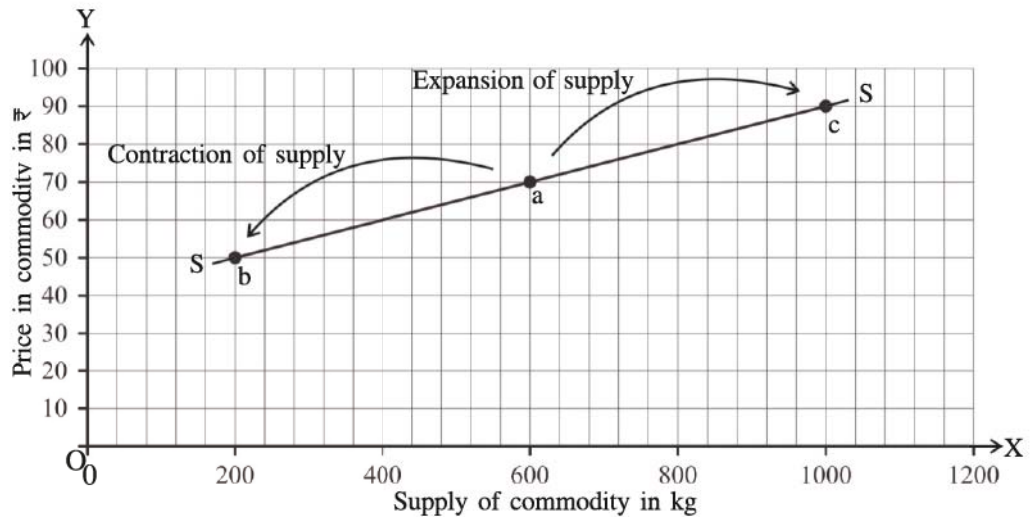
- (1) Sellers pursue the objective of profit maximization and when price rises they see the possibility of increasing profits. Thus, they supply more at a higher price.
- (2) When price rises, those producers who were not willing to sell their stocks at lower price start selling the stocks.

4.8 Change in Supply

The determinants of supply are classified under two major categories as price and factors other than price. When other factors are assumed to remain constant and price is varied, there is expansion and contraction of supply. When price is held constant and other factors are varied, there is an increase and decrease in supply.

4.8.1 Expansion-Contraction of Supply : When other factors are assumed to remain constant and price is varied, there is expansion and contraction of supply. Other factors may constitute, cost of production/prices of factors of production, number of sellers, level of technology, government policies etc.

Price of Apples in ₹	Supply of Apples in kg
50	200
60	400
70	600
80	800
90	1000



4.3 Expansion and Contraction of Supply

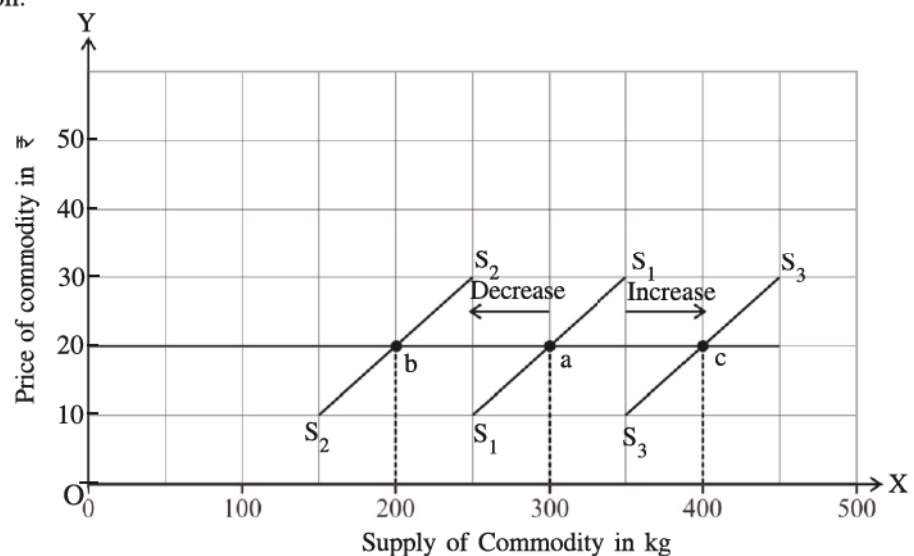
In the above diagram, price of apples is represented on 'Y' axis and supply of apples on 'X' axis. Suppose the initial price is ₹ 70 then the initial supply is 200 kgs. which is seen at point 'a'. When price rises to ₹ 80, supply extends to 800 kgs. and when price rises still further to ₹ 90, supply extends to 1,000 kgs. at point 'c' and so on. The movement from point 'a' to point 'c' on supply curve SS is called expansion of supply. Now from the initial point 'a' if price falls to Rs. 60, supply contracts to 400 kgs. and if price falls further to ₹ 50 and supply contracts to 200 kgs. as seen at point 'b' on the supply curve then the movement from point 'a' to point 'c' on the same supply curve SS is called contraction of supply.

4.8.2 Increase-Decrease in Supply : When one factor or some factors other than price change in favour of the supply of a good then there is a rightward/upward shift in the supply curve.

If cost of production falls, prices of factors of production fall, state of technology improves, number of suppliers increase, government policies change in favour of a product then even if price of a good remains constant, its supply increases as the entire supply curve shifts to the right.

If these factors change against the supply then at the same price, supply decreases as the entire supply curve shifts to the left. This happens when cost of production rises, prices of factors of production rise, technology becomes expensive, number of suppliers decrease, government policies change against the supply of a product and so on.

Price of Apples in ₹	Supply of Apples in kg
20	100
20	200
20	300
20	400
20	500



4.4 Increase and Decrease of Supply

In the above diagram, price is represented on the 'Y' axis and supply on the 'X' axis.

Initial supply curve is S_1S_1 where at price of ₹ 20 the supply of apples is 300 kgs. which is depicted by point 'a' on the supply curve S_1S_1 .

When price remains constant at ₹ 20 but one or some of the other factors change in favour of supply of apples then the supply curve shifts to the right to S_3S_3 and the supply of apples increases to 400 kgs. which is depicted by point 'c' on S_3S_3 . Now if one or some of the other factors change against the supply of apples then the supply curve shifts to the left to S_2S_2 and the supply of apples decreases to 200 kgs. which is depicted by point 'b' on S_2S_2 .

4.9 Exceptions to the Law of Supply

The question that might now arise is, 'Does the law of supply have exceptions like the law of demand ? Though several exceptions are pointed out by some people, these are technically debatable.

Exceptions to law of supply arise when supply of a good rises when its price falls and supply falls when price rises, when other factors are held unchanged.

4.9.1 Rare Goods : Certain goods are rare and hence even if there is a significant rise in their prices, their supply does not rise. For example, ancient coins, ancient idols, original manuscripts, old books, ancient handicrafts etc. However, such goods do not have any current production and therefore instead of considering these as exceptions to the law of supply, should be kept out of the study of supply.

4.9.2 Perishable Goods : Highly perishable goods like milk, milk products, green vegetables, meat, eggs, fish, ripe fruits, flowers etc. cannot be stored for a long time. Hence, even if their price falls their supply will not contract as they cannot be preserved and hence must be sold. However, in current times with availability of cold storages even this exception is debatable.

4.10 Price Determination in the Market

Price determination explains the process of determining a stable price at which goods are actually bought and sold in the market.

Such determination of prices is done in all forms of markets and is known as determination of equilibrium price level.

Lay persons may think that prices are decided by the producer or seller. But in reality it is not so. Individual producers or sellers do not decide the prices. Prices are determined by the interaction of market demand and supply. Since supply schedule and demand schedule move in opposite

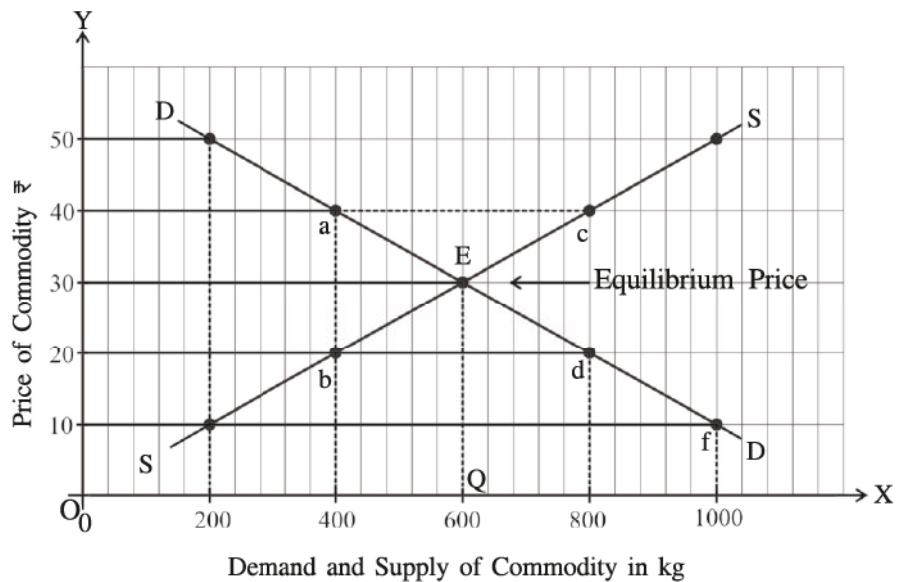
directions, equilibrium is attained only where the two curves intersect each other. Such a price prevails in the market and individual sellers take this price as a signal to determine prices of their individual produce in the industry. In perfect competition firms take this price as given, in monopolistic and oligopoly markets this price is taken as a signal. Even a monopolist has to take a price signal from the total demand and total supply.

According to Marshall, the market demand and market supply are called the invisible hands of market and the entire process is invisible. The two curves form a cross as shown in the figure below.

In the figure, the demand curve DD and the supply curve SS move in the opposite directions. However, they intersect at point 'E' which is called the equilibrium point. At this point the equilibrium price is ₹ 30 (EQ) and quantity demanded and supplied is 600 units (OQ) which is called the equilibrium quantity.

Imaginary Schedule of Demand, Supply

Price of Commodity in ₹	Price of Commodity in kg	Supply of Commodity in kg
10	1000	200
20	800	400
30	600	600
40	400	800
50	200	1000



4.5 Diagram of Price Determination

If price is raised by the industry to ₹ 40 by ignoring the demand and supply schedules, the total demand contracts to 400 units from 600 units while the supply expands to 800 units. Since demand is lesser than supply as shown by the distance between points 'a' and 'c', the market price will have a tendency to fall back to ₹ 30. This is the equilibrating process of the market.

Now if price is reduced by the industry to ₹ 20 by ignoring the demand and supply schedules, the total demand expands to 800 units while supply contracts to 400 units. Since demand is greater than supply as shown by the distance between points 'd' and 'b', the market price will have a tendency to rise back to ₹ 30. This again is the invisible process of the market.

Exercise

1. Choose correct option for the following from the options provided :

- (1) What are the changes that take place in supply due to decrease in the price of a commodity ?
(A) Increase (B) Expansion (C) Contraction (D) Decrease
- (2) What are the changes that take place in supply due to change in factors other than price ?
(A) Increase (B) Expansion
(C) Expansion-contraction (D) Increase-decrease
- (3) What is the relationship between price and supply of commodity ?
(A) Direct (B) Opposite (C) Equal (D) Zero
- (4) What decreases, therefore profit decreases and due to that supply decreases ?
(A) Stock (B) Supply
(C) Price (D) Price elasticity of demand
- (5) Stock is always than supply.
(A) Higher (B) Lower (C) Not higher (D) Negligible
- (6) If there is expectation about rise in price in future then present supply
(A) Increases (B) Decreases (C) Remain constant (D) Become zero

2. Answer following questions in one sentence :

- (1) What is stock ?
- (2) Which are the two matters on, which law of supply is presented ?
- (3) Define supply.
- (4) What is supply schedule ?
- (5) How is the slope of supply curve ?
- (6) Why is the law of supply not applicable to rare articles ?
- (7) Which types of commodities are an exception to the law of supply ?

3. Answer the following questions in short :

- (1) Distinguish : Stock and Supply.
- (2) Explain meaning of individual supply and market supply.
- (3) Why can supply be more than production, but can not be more than stock ?
- (4) The supply curve is positively sloped. Explain with reasons.

4. Answer the following questions in brief points :

- (1) Write short note on supply function.
- (2) State exceptions to the law of supply.
- (3) Explain expansion-contraction of supply along with diagram.
- (4) Explain increase-decrease of supply along with diagram.

5. Answer the following questions in detail :

- (1) Discuss in detail the factors affecting supply.
- (2) Explain law of supply in detail with the help of a schedule and diagram.
- (3) Explain the price determination process of market along with a diagram.

Glossary

Production	Production is the amount of goods created by the available factors of production during a fixed time period.
Supply	It is that amount of production which a producer is able and willing to sell in the market at a given price and at a particular point of time.
Stock	Stock is the total available amount of goods with a producer which can be offered for sale in the market as per the ability and willingness of the seller.
Supply Schedule	A schedule showing a seller's willingness to sell a good at various prices is called the supply schedule.
Supply Curve	A curve obtained by plotting a producer's/seller's willingness to sell at various prices is called the supply curve.
Expansion of Supply	A rise in quantity supplied which occurs when other factors are held constant but price of the good is raised.
Contraction of Supply	A fall in quantity supplied which occurs when other factors are held constant but price of the good is reduced.
Increase in Supply	A rise in quantity supplied which occurs when price of the good is held constant but one or some of the factors other than price change in favour of supply.
Decrease in Supply	A fall in quantity supplied which occurs when price of the good is held constant but one or some of the factors other than price change against supply.
Individual Supply	The schedule of an individual seller showing the willingness to supply a good at various prices is called individual supply.
Market Supply	The sum total of quantities which all suppliers in the industry are willing to supply a good at various prices is called market supply.
Supply Function	Supply function is a mathematical representation of the relationship of supply of a good with its determinants.
Equilibrium Price	Price determined by interaction of total market demand and total market supply which prevails in the market is called equilibrium price.



5

Cost of Production and Concept of Revenue

- Introduction
- 5.1 Various Concepts of Cost
 - 5.1.1 Real Cost
 - 5.1.2 Opportunity Cost
 - 5.1.3 Monetary Cost
- 5.2 Short Term and Long Term
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 - 5.3.6 Average Cost
 - 5.3.7 Marginal Cost
- 5.4 Inter-relationship between Average Cost and Marginal Cost
 - 5.4.1 Marginal Cost < Average Cost
($MC < AC$)
 - 5.4.2 Marginal Cost = Average Cost
($MC = AC$)
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($MC > AC$)
- 5.5 Long Run Average Cost Curve
- 5.6 Concepts of Revenue
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 - 5.6.3 Marginal Revenue
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- 5.8 Total Revenue, Average Revenue and Marginal Revenue under Imperfectly Competitive Market

Introduction

In Economic Analysis it is mainly important to understand concept of cost and revenue to understand behaviour of firm. As there is change in quantity of production there is change in total cost by cost we come to know the debit side and by revenue we come to know the credit side of the firm. Concept of revenue and cost determine the normal production level :

(1) Helps firms to decide price of its commodity.

(2) Provides guidelines to maximise the profit of the firm.

(3) Marginal cost is useful to explain maximum profit.

(4) Concept of marginal cost is helpful to understand the behaviour of a firm.

(5) Concepts of cost and revenue play an important role in taking decisions like, what amount of factors of production are invested by firms, how much employment is given, what amount of production and investment is done.

(6) Concept of opportunity cost is important to know the alternative uses of factor of production in managerial economics.

(7) Concepts of monetary cost is useful to give guideline for the administration of a firm.

Due to above mentioned causes, it is important to study cost and revenue of a firm. To produce any goods or services whatever expenditure is incurred that is known as cost of production. First we will study different concepts of cost of production.

5.1 Various Concepts of Cost

5.1.1 Real Cost : Concept of real cost was given by classical economist. They had presented this concept in context of main factor of production land and labour but in modern times this concept is considered in context of capitalist and entrepreneur also.

According to Marshall 'The labourers, capitalists and entrepreneurs who are involved in the process of production bear psychological and physical burden. Such burden is called real cost. Money spent by many producers for production work of goods is not only production cost but the fatigue, boredom tension, stress. faced by the labourers, the capitalist who sacrifice their saving and capital face anxiety, insecurity of indecisiveness are the factors included in the real cost. Real cost can not be presented in Monetary term therefore real cost is also called non-monetary cost. Prof. Marshall says, the factors of production face this real cost and to attract them return is given in the form of wage, interest and profit.

Problems in Measuring Real Cost : Real cost includes fatigue, boredom, pain, sacrifice and anxiety. The goods which have psychological impact are difficult to be measured. Moreover, the smoke emitted by factories created adverse effect on health of the people of surrounding area. The adverse effect is also a cost in social view and therefore it cannot be measured.

5.1.2 Opportunity Cost : The Concept of opportunity cost was presented by Austrian economist but it was properly presented by Marshall. The means of production have alternative uses i.e. more than one use. This concept is based on the particular characteristic of factor of production when a factor is used for a particular use, the other use is left out or the same cannot be used for other purpose therefore the best alternative which one is left is the opportunity cost of production. For example, on one field or piece of land of wheat is produced then at the same time on the same piece of land other foodgrain (crop) cannot be produced, worker is working in textile mill so at the same time he cannot work in any other industry, this way factor of production have alternative uses.

Meaning-Explanation : If factor of production is used in the production of one commodity so the next best alternative is left out. The cost of unborn or unproduced commodity is the opportunity cost of produced commodity. This can be understood with the help of one example. One piece of land can be used to produce wheat or rice. If wheat is produced on that piece of land the income of 2 lakh ₹ can be earned and if Rice is produced the income of ₹ 3.5 lakh can be earned, farmer behaviour is rational and logical. So he will leave the production of wheat and produce rice in which he is earning total ₹ 3.5 lakh. To get the income of ₹ 3.5 lakh from the production of rice, farmer left out income of ₹ 2 lakh from the production of wheat. So the left out income of ₹ 2 lakh from the production of wheat is the opportunity cost of ₹ 3.5 lakh earned from the production of rice.

Problems in Measuring of Opportunity Cost :

(1) **Factors with One Use :** If any factor of production has only one use then its opportunity cost cannot be decided. For example, some piece of land is only used to produce grass so far as that piece of land opportunity cost cannot be calculated. It will be applied for unemployed person also. They have no work so how can we calculate alternative cost.

(2) **Factor having Specific Use :** If factors of production are specific factor, then this concept is not useful. Returns of these factors are not decided by their alternative uses but it is decided on the basis of their demand For example, persons having expertise over computers, scientist having knowledge of atomic power etc.

5.1.3 Monetary Cost : Concept of monetary cost is useful in economic analysis, decisions related to production and in price determination because real cost and opportunity cost have many limitations, cost of production is calculated in terms of money therefore concept of monetary cost is important. Producer having objective of maximum profit produces goods at low cost and tries to maximise profit from the in

come by selling the product. The cost of production in terms of money is known as monetary cost. For example, if a factory producing pens incur the cost of ₹ 50,000 to produce 1000 units of pen. So the monetary cost to produce 1,000 units of pen is ₹ 50,000.

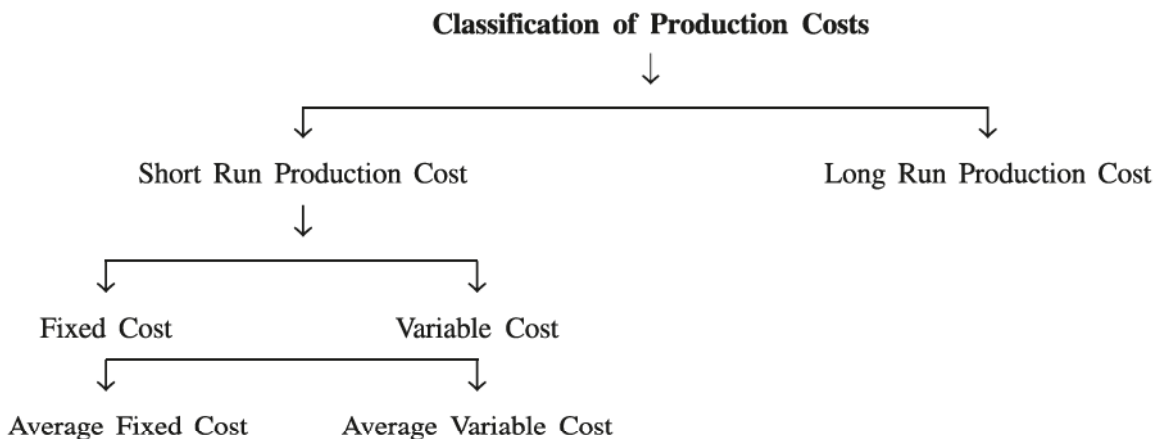
5.2 Short Term and Long Term (Short Run and Long Run Periods in Economics)

According to time period also, in short term monetary cost is presented. There are some factors of production whose quantity can be changed easily with the change in quantity of factors of production. Quantity of production also changes. Raw material, extra labourers, fuel are those factors which can be changed in short period therefore they are known as variable factors. Expenditure on those factors is known as variable cost. On the other hand machinery, building of factory, administrative staff can not be changed (increase) in short period of time therefore they are known as fixed factor of production and cost of such factors is known as fixed cost of production.

Short Term : A short term is such a period in which a producer cannot change the size of firm but can increase production by use of factors of productions—capacity. Short term is such a time period in which certain factor of production are fixed. For example, plant, heavy machinery, building of a factory etc. with the increase or decrease of variable factors like raw material, labour, electricity etc production can be increased or decreased.

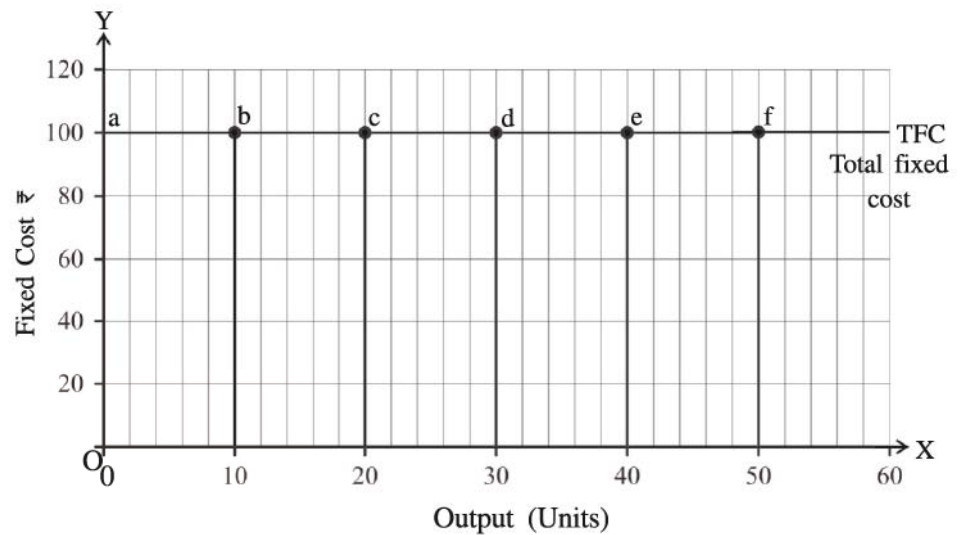
Long Term : Long term is a period in which a producer can change all the factors of production, so in this period all factors of production are variable. For example, plant, heavy machinery, building of a factory etc. By increasing or decreasing these factor of production, production can be increased or decreased in long term. Producer can change the size of the firm and doing so he can change the total production to a large extent in a long term. Firm increases the size of the firm by new and modern technology.

5.3 Classification of Production Costs



5.3.1 Fixed Cost : In short period, either production increases, decreases or remains zero. There is no change in production cost, that type of cost is known as fixed cost. Fixed cost is also known as overhead cost. In short period there is no relation between fixed cost and quantity of production following things are included in the fixed cost. For example, permanent staff's salary, rent of factory building, house-property tax, licence fee, interest on capital, premium of insurance etc. Let us understand the fixed cost with the help of schedule and diagram.

Units of Output	Total Fixed Cost (₹)
00	100
10	100
20	100
30	100
40	100
50	100



5.1 Diagram of Total Fixed Cost

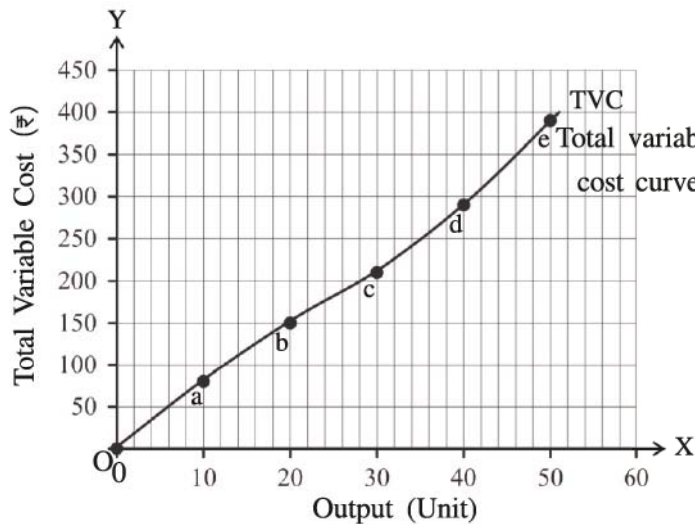
In schedule, it is shown that production of pen is either 00 or 10, 20, 30, 40, 50 with the increase in units of production, cost remains the same i.e. ₹ 100. This cost is fixed. This type of cost is known as total fixed cost, here production unit changes but cost does not change therefore it is known as total fixed cost.

Diagrammatic Presentation : In diagram on X-axis output (unit) is measured and on Y-axis total fixed cost in ₹ is shown. According to diagram either production is 00 or 10, 20, 30, 40 or 50 production cost is ₹ 100 only in the diagram TFC curve is parallel to X-axis.

5.3.2 Variable Cost : When cost incurred on variable factors by producer is called variable cost. In short term with the change in quantity of production cost also changes with the increase in production, cost also increases and with the decrease in production, cost also decreases and if production is zero then cost is also zero. It is known as variable cost. Variable cost is also known as unstable or direct or main cost. This cost has direct (positive) relation with quantity of production. In variable costs following things are included. For example, price of raw material, energy consumption, transportation expenditure, labour wages, tax on product and sale tax etc. As production increases this cost also increases. Therefore this is known as variable cost. Difference between fixed cost and variable cost is possible in short period of time only. In a long run (period) all costs are variable.

When production is zero, variable cost is zero but as production increases, variable cost also increases. From the table, we can see that till 30 units variable cost is increasing at a diminishing rate because increasing returns to scale is applicable. After 30 units decreasing return to scale is applicable due to that variable cost is increasing at increasing rate.

Units of Output	Total Variable Cost (₹)
00	00
10	80
20	150
30	210
40	290
50	390



5.2 Diagram of Total Variable Cost

In diagram on X-axis output (Units) is measured and on Y-axis total variable cost in ₹ is measured. As production increases from 10, 20, 30 total variable cost also increases from 80, 150, 210 total variable cost has positive slope from initial point as it increases at decreasing rate initially, later on at increasing rate.

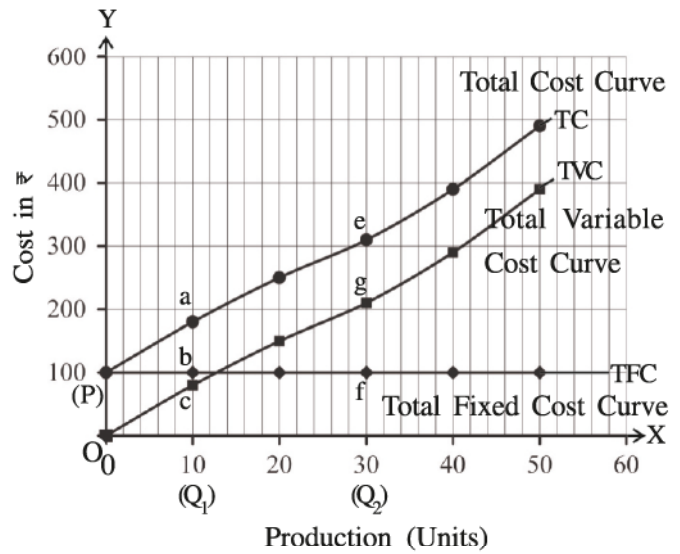
In short term, fixed cost is fixed but variable cost keeps on changing. This cost is directly related with production that is why Prof. Marshall has said variable cost as a main cost.

5.3.3 Total Cost : There is a cause effect relationship between total production and total cost. If total production is more, then total cost is also more, sum of total fixed cost and total variable cost is equal to total cost.

$$TC = TFC + TVC$$

With the increase in production fixed cost remains fixed but variable cost increases. Total cost increases as increase in amount of variable cost. Therefore TC curve is above TVC curve. Note that the difference between TC and TVC is constant because of which TC and TVC are parallel to each other. We can see in diagram.

Production (Unit)	Total Fixed Cost (₹)	Total Variable Cost (₹)	Total Cost (₹)
00	100	00	100
10	100	80	180
20	100	150	250
30	100	210	310
40	100	290	390
50	100	390	490



5.3 Diagram of Total Cost

On X-axis production and on Y-axis cost is shown with the increase in production. There is no change in fixed cost but variable cost increases. As a result of increase in production total cost also increases. Total cost curve begins from point P on Y-axis. This shows that if output is zero then also TFC = 100 (OP), while TVC = 0. As the production increases TFC remains constant and TVC increases. Due to this TVC curve moves upward from left hand side to right hand side and TC curve is upside and parallel to TVC curve.

When,

- (1) Production is zero TVC is 0
- (2) Production is zero TFC is OP and VC is 0 and TC is OP.
- (3) Production is OQ_1 then TFC is Q_1b , VC is Q_1c and TC is Q_1a .
- (4) Production is OQ_2 then TFC is Q_2f , VC is Q_2g and TC is Q_2e .

5.3.4 Average Fixed Cost : Average Fixed Cost is the cost of per unit of output. By dividing total fixed cost of a firm with production unit we get Average Fixed Cost.

$$\text{Average Fixed Cost} = \frac{\text{Total Fixed Cost}}{\text{Total Production Unit}}$$

$$\text{AFC} = \frac{\text{TFC}}{\text{TP}}$$

AFC = Average Fixed Cost

TFC = Total Fixed Cost

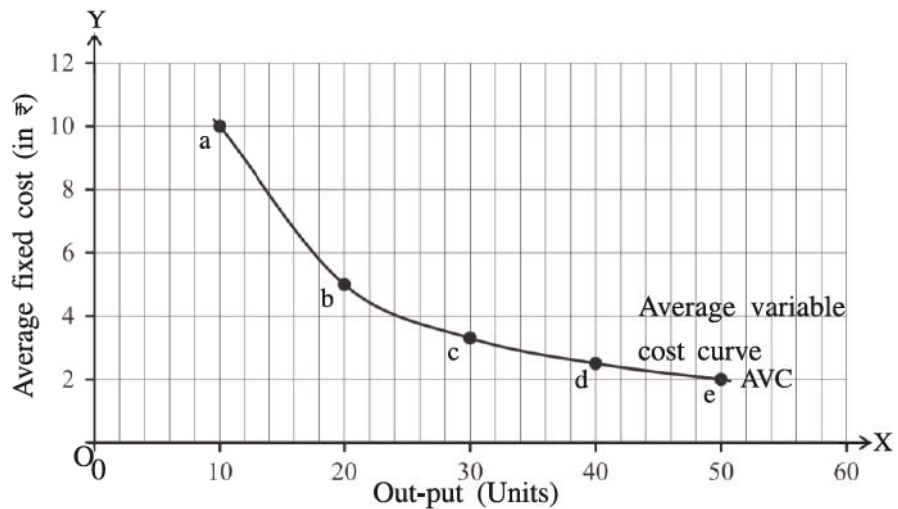
TP = Total Production

Let's try to understand with an examples e.g. One company total fixed cost is ₹ 50,000 and producer produces 1000 units of commodity then

$$\text{Average Fixed Cost is} = \frac{50000}{1000} = 50 \text{ ₹}$$

When production increases the total fixed cost is distributed among more units, therefore with the increase in production, average fixed cost decrease and therefore average fixed cost curve is a downward sloping curve. In schedule and diagram relation between production and average fixed cost is shown :

Out-put (Units)	Total Fixed Cost(₹)	Average Fixed Cost(₹)
10	100	10
20	100	05
30	100	03.3
40	100	02.5
50	100	02



5.4 Diagram of Average Fixed Cost

In diagram 5.4, it is shown that as output increases, average fixed cost decreases. On OX-axis output (Units) is shown and OY-axis average fixed cost in ₹ is shown. average fixed cost decreases as output increases. It means that average fixed cost curve is having left to right upward to downward slope. average fixed cost decreases but it never become zero.

5.3.5 Average Variable Cost : Total variable cost of a firm divided by total units produced, we get average variable cost. Average variable cost is the variable cost per unit of output. This concept is useful in taking a decision regarding continuing production, increasing production or closing down. To find out this cost, formula is on page 52.

$$\text{Average Variable Cost} = \frac{\text{Total Variable Cost}}{\text{Total Production (Units of Production)}}$$

$$\text{AVC} = \frac{\text{TVC}}{\text{TP}}$$

AVC = Average Variable Cost

TVC = Total Variable Cost

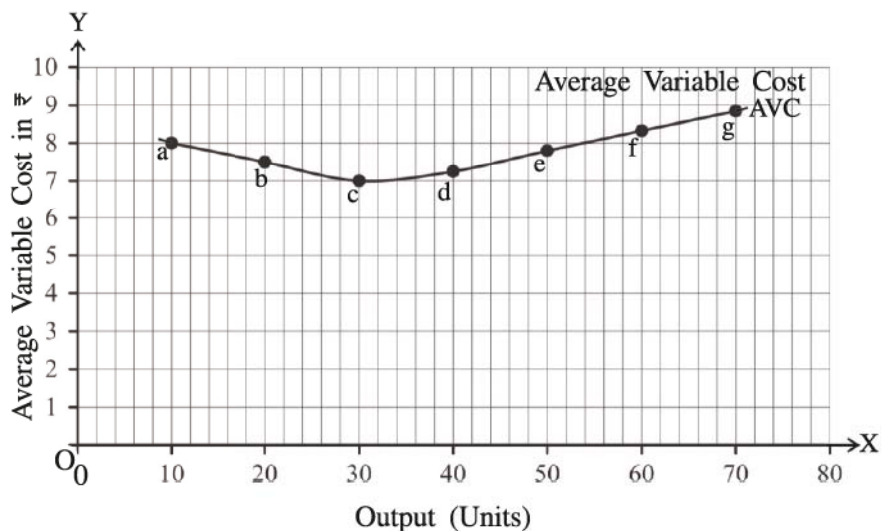
TP = Total Production

For example, suppose firm's total variable cost is ₹ 150 and a firm produce 20 units of output then

$$\text{AVC} = \frac{150}{20} = ₹ 7.5$$

As output increases, average variable cost also increases. Initially with the increase in production Average Variable Cost decreases, then it become minimum and after that with the increase in production Average Variable Cost also increases. It means it has relation with the volume of production. This can be understood with the help of table and diagram.

Out Put (Units)	Total Variable Cost (₹)	Average Variable Cost (AVC) (₹)
10	80	8
20	150	7.5
30	210	7
40	290	7.25
50	390	7.8
60	500	8.33
70	620	8.85



5.5 Diagram of Average Variable Cost

In diagram 5.5, output is shown on X-axis and AVC is on Y-axis. Here in the diagram first average Variable Cost move left to right upward to downward means negative slope curve, which indicates that in beginning as output increases average variable cost decreases but after the production of thirty (30) units, average variable cost is an increasing trend. Because in the beginning, increasing return to scale and afterward decreasing return to scales law may apply.

5.3.6 Average Cost : Average cost is also known as average total cost. Average cost is cost per unit of production. Average cost is found by dividing total cost by units of production. Total cost is a sum of total fixed cost and total variable cost therefore total fixed cost + total variable cost is divided by production unit we get average cost.

$$\text{Average cost} = \frac{\text{Total Cost}}{\text{Total Production (Units of Production)}}$$

OR

$$\text{Average cost} = \frac{\text{Fixed Cost} + \text{Variable Cost}}{\text{Total Production (Units of Production)}}$$

$$AC = \frac{TC}{TP} \text{ in which, } AC = \text{Average Cost}$$

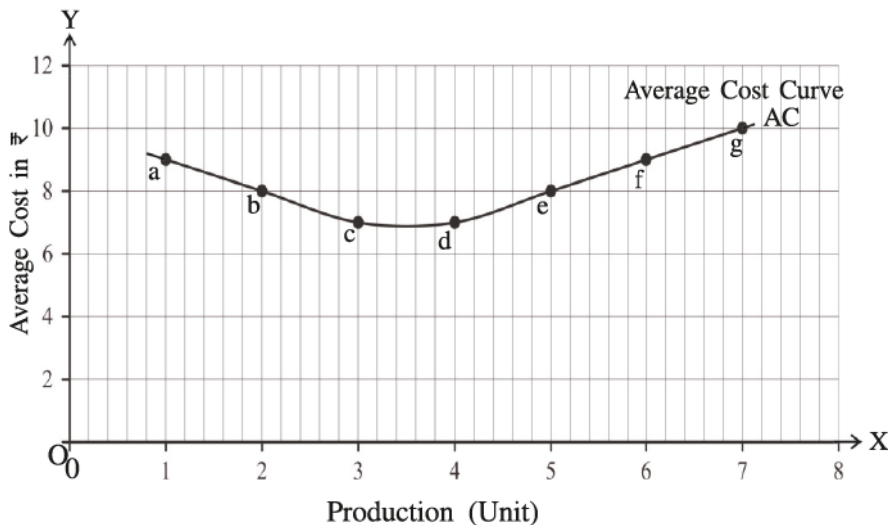
TC = Total Cost

TP = Total Production

Example : Trends of a firm are as below :

Production in Unit (P)	Total Cost in ₹ (TC)	Average Cost in ₹ (AC)
1	09	09
2	16	08
3	21	07
4	28	07
5	40	08
6	54	09
7	70	10

As the level of output increases, the total cost rises. But initially the average cost falls then remains constant and subsequently rises. If such a trend of average cost is plotted, the following diagram is obtained :



5.6 Diagram of Average Total Cost (ATC/AC)

In diagram 5.6, on X-axis output and Y-axis average cost is shown in the beginning with the increase in output. Average cost decrease after some units of production increase in average variable cost is more in comparison to decrease in average fixed cost and due to that total cost increases and average cost curve becomes 'U' shaped in short, initially with an increase in production the average cost decreases then at

a particular level of production it is minimum but after that it increases with an increase in production. Therefore, average cost curve becomes 'U' shaped.

5.3.7 Marginal Cost :

Meaning : We know that if production is increased the cost of production also increases with the increase or decrease of one unit in total production, what ever change take place in total cost is known as marginal cost. In short, marginal cost is the change in total cost when an additional unit of output is produced.

Formula and Example : By the difference of n units of production cost and $n - 1$ units of production cost we find out marginal cost (MC).

$$MC_n = Tc_n - Tc_{(n-1)}$$

n = Number of units

MC_n = Marginal cost of n units of output

Tc_n = Total cost of n units of output

$Tc_{(n-1)}$ = Total cost of $(n - 1)$ units of output

By putting volume of $n = 3$ in formula we get,

$$Mc_3 = Tc_3 - Tc_{(3-1)}$$

$$= Tc_3 - Tc_2$$

Where $Tc_3 = 21$ and $Tc_2 = 16$

$$Mc_3 = 21 - 16$$

= 5 is marginal cost

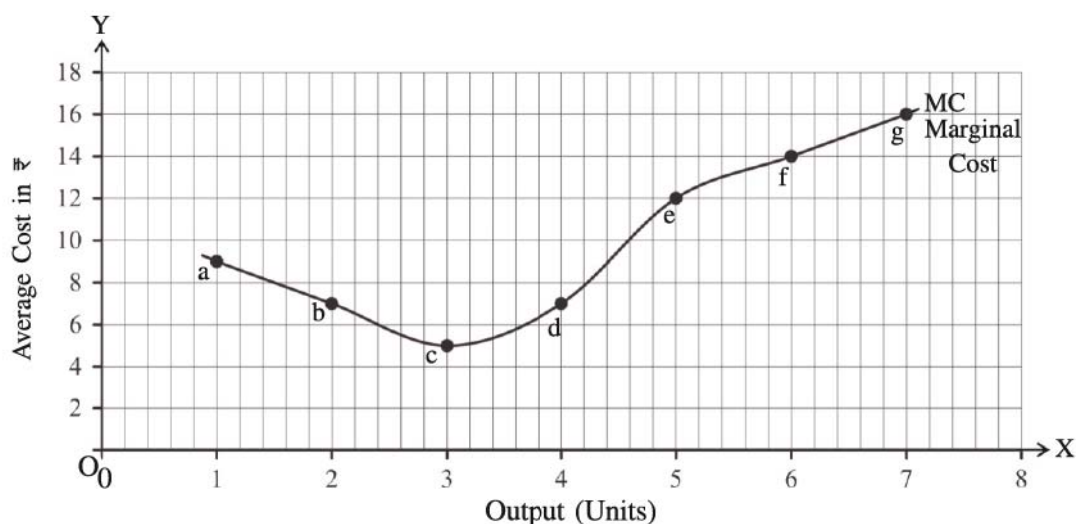
The table shows that marginal cost of the 3rd unit is the difference of the 3rd and the 2nd unit of total cost i.e. 5.

This should be kept in mind that marginal cost is independent of fixed cost. Therefore, it can be said that marginal cost is the result of change in variable cost when production decrease from n and goes to $n - 1$ then increase in total variable cost is equal to marginal cost with the change in production of output marginal cost is equal to total cost.

Table :

Output (Units)	Total Cost (TC) (in ₹)	Marginal Cost (MC) (in ₹)
1	09	09
2	16	07
3	21	05
4	28	07
5	40	12
6	54	14
7	70	16

From the table, it is known that till increase in the 3rd unit, marginal cost is decreasing. At the 3rd unit, marginal cost is minimum after that there is continuous increase in marginal cost. This behaviour can be shown in the diagram.



5.7 Diagram of Marginal Cost

As shown in the diagram, in the beginning marginal cost decreases as total average cost decreases initially, but after some time there is increase because initially with the increase in production total variable cost increases at diminishing rate and after some point increases at increasing rate. Due to that initially with the increase in production marginal cost decreases and after some point it increases. In the diagram, marginal cost curve is like “Hockey Stick”(✓). Till the third unit, marginal cost is decreasing therefore marginal cost curve has negative slope after the third unit with the increase in production MC increases therefore marginal cost curve has positive slope.

5.4 Inter-relationship between Average Cost and Marginal Cost

The relationship between the average cost and the marginal cost holds an important place in the study of production cost. Cost per unit of output is called average cost and the marginal cost is the cost increased to produce one extra unit of commodity. Producer in long run decides to continue production when price of commodity is more than average cost and in short run will take decision to continue the production when price of commodity is more than marginal cost. In this way the average cost and the marginal cost play important role in taking a decision about production. Now with the help of table and diagram relation between average cost and marginal cost will be explained.

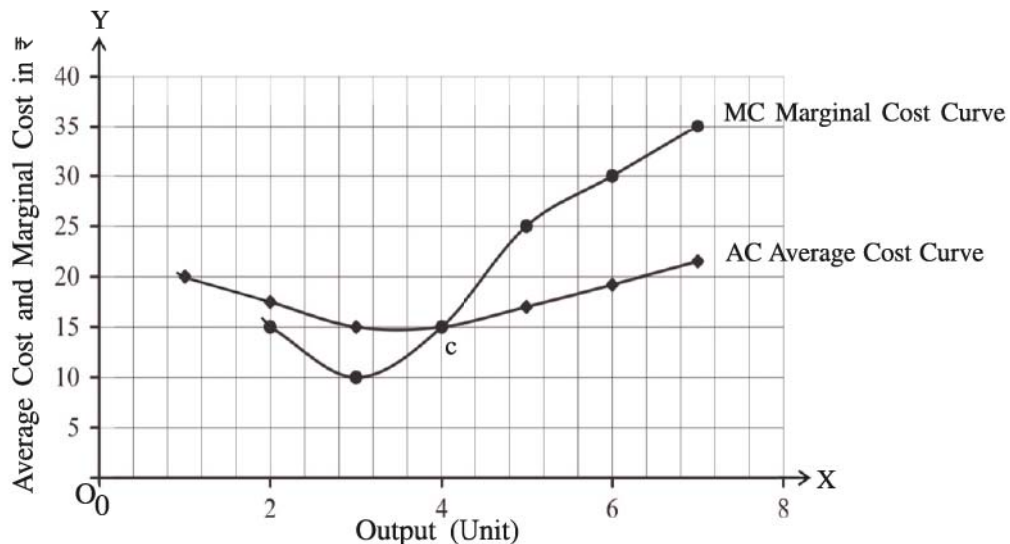
Example : For the production of commodity i.e. AC, MC and TC of a firm is as shown below :

Schedule :

Output (Units)	Total Cost (₹) (TC)	Average cost (₹) (AC)	Marginal Cost(₹) (MC)
1	20	20	-
2	35	17.5	15
3	45	15	10
4	60	15	15
5	85	17	25
6	115	19.2	30
7	150	21.5	35

As shown in the schedule, as output increases, initially the Average Cost and the Marginal Cost both decrease because of the law of increasing returns to scale is applicable. At the 4th unit of output Average Cost and the Marginal Cost both are equal and AC is minimum after that due to the decrease returns to scale, AC and MC both increase. This can be stated by schedule and diagram as below :

Diagram : In diagram, on X-axis output (units) and Y-axis the Average Cost and the Marginal Cost are shown, relation between AC and MC is also shown below :



5.8 Diagram of Relationship between Average Cost and Marginal Cost

Relation :

5.4.1 Marginal Cost < Average Cost (MC < AC) : Initially, average cost decreases, then marginal cost also decreases but marginal cost decreases more rapidly than the Average Cost. That is why when marginal cost curve is decreasing it remain below the average cost curve.

5.4.2 Marginal Cost = Average Cost (MC = AC) : When Average Cost is minimum at that time Marginal Cost curve intersect to the Average Cost curve from below and the Marginal Cost and Average Cost become equal. (Average Cost = Marginal Cost)

5.4.3 Marginal Cost > Average Cost (MC > AC) : When Marginal Cost curve intersect the Average Cost curve then both cost start to increase. After this point increase in MC cost is rapid than the increase in Average Cost therefore Marginal Cost curve above than Average Cost curve in the given diagram.

5.5 Long Run Average Cost Curve

According to Benham in the long run, there is no distinction between fixed cost and variable cost. The classification of costs as fixed and variable becomes irrelevant in the long run as all factors of production become variable. In order to increase production in the long run, factors of production can be altered in any proportion. Therefore, the scale of a firm expands. For example, the remuneration paid to an employee is considered as a fixed cost in the short run. However, in the long run, in response to an increase in demand, if the producer, decides to increase production then she/he may

employ new workers or buy new land or rent in new land etc. Thus, factors which are fixed in the short run become variable in the long run.

5.6 Concepts of Revenue

In capitalist market structure the main objective of production is to maximise profit, therefore the concept production is to maximise profit, therefore the concept of revenue assumes significance. When total revenue of a firm is higher than its total cost, profits accrue and if total revenue is lower than total cost, losses occur. However, while analysing profits in the short run the concepts of average revenue and marginal revenue are used more often. We proceed to understand the concept of total revenue, marginal revenue and average revenue.

5.6.1 Total Revenue : By selling of produced units money received by firm is known as revenue. Total income received by firm from sale is called total revenue. This income is known as total revenue or sale revenue. Firm's total income is based on two things (1) Price per unit and (2) Total sale. When both factors or any one factor changes the revenue of firm changes. Let us try to understand total revenue with one example. A firm produces pen and per unit market price of pen is ₹ 50 and total sale of firm is 100 units of pen then total revenue of firm is $100 \times 50 = ₹ 5000$ to find out total revenue this formula is used.

Total Revenue = Units Sold \times Price of Commodity

$$TR = Q \times P$$

$$5000 = 100 \times 50$$

$$= ₹ 5000$$

If the sale unit of commodity increases or decreases or price increases or decreases or there is a change in both factors then firm's total revenue changes.

5.6.2 Average Revenue : We find out average revenue of a firm by dividing total revenue to sale units means....

$$\text{Average Revenue} = \frac{\text{Total Revenue}}{\text{Total Sale}}$$

$$AR = \frac{TR}{Q} \text{ in which } AR = \text{Average Revenue}$$

$$TR = \text{Total Revenue}$$

$$Q = \text{Quantity Sold}$$

Let us understand with the help of example. One firm has sold 1000 units of pen and total revenue is ₹ 50,000 according to formula $\frac{50000}{1000} = ₹ 50$ is average revenue. It means revenue per unit of pen.

Normally, firm sells all units of commodity at a same price, then Average Revenue is equal to price. If price and Average Revenue are equal then for producer, it is demand curve, which is also Average Revenue

curve for him. Demand curve shows, on different price how many commodities, consumer is ready to purchase. On the other hand the Average Revenue Curve shows the Average Revenue of a producer with the sale of commodity. In short, we remember that Average Revenue by the angle of producer is also price of consumer angle.

5.6.3 Marginal Revenue : The income from per unit sale is average revenue of firm whereas Marginal Revenue is revenue from the sale of one additional unit so the Marginal Revenue is the change in total revenue which results from the sale of one more unit of a commodity. For example, firm receives income of ₹ 50,000 by selling 1000 units of pen. Now firm sells 1001 unit of pen and firms revenue increases from 50,000 to ₹ 50,045 means increase of ₹ 45 is Marginal Revenue. So we can say the Marginal Revenue is the change in total revenue on account of the sale of an additional unit of output. We can put Marginal Revenue in formula or equation as under :

$$MR_n = R_n - R_{(n-1)}$$

where, MR = Marginal Revenue

n = Number of sold units

R_n = Revenue from the sale of n units commodity

$R_{(n-1)}$ = $(n - 1)$ revenue from sale of units

In earlier example, we have seen that 1000 pen is sold at the price of ₹ 50 and total revenue is ₹ 50,000 now if 1001 unit of pen is sold then total revenue is ₹ 50,045 as per the formula. Marginal revenue find out as under :

Here, $n = 1001$ and

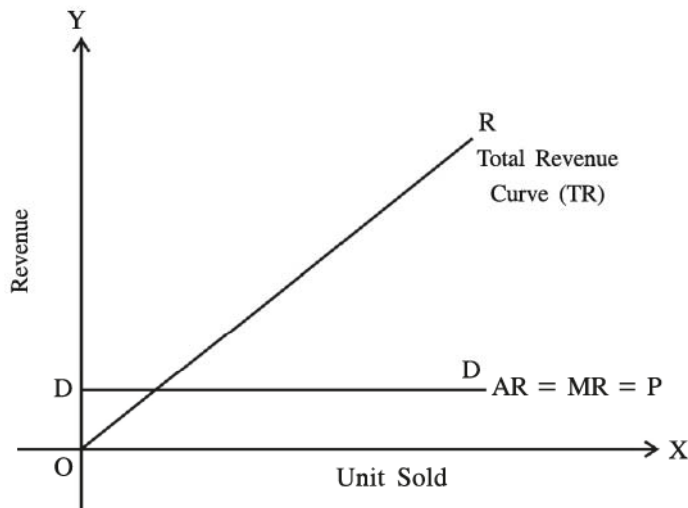
therefore $(n - 1) = 1000$

$$\begin{aligned} MR_n &= R_n - R_{(n-1)} \\ &= ₹ 50,045 - ₹ 50,000 \\ &= ₹ 45 \text{ is Marginal Revenue} \end{aligned}$$

5.7 Total Revenue, Average Revenue and Marginal Revenue under Perfect Competitive Market

Perfectly competitive market is such a market where firm accepts market price and sell its commodity. In perfect competition market, commodities are homogeneous and there are large number of buyers and sellers. Buyers and sellers have complete knowledge of market situation, price is determined by demand and supply of a commodity and firm sells commodity on that price only no firm can effect the price. Therefore, price is fixed and constant.

In perfect competition market price = Average Revenue = Marginal Revenue ($P = AR = MR$). If price of commodity is ₹ 50 then Average Revenue and Marginal Revenue of firm is ₹ 50 only. Therefore, firms Average Revenue and Marginal Revenue curve is same and parallel to X-axis in diagram we can see this by DD curve, which is horizontal to X-axis.



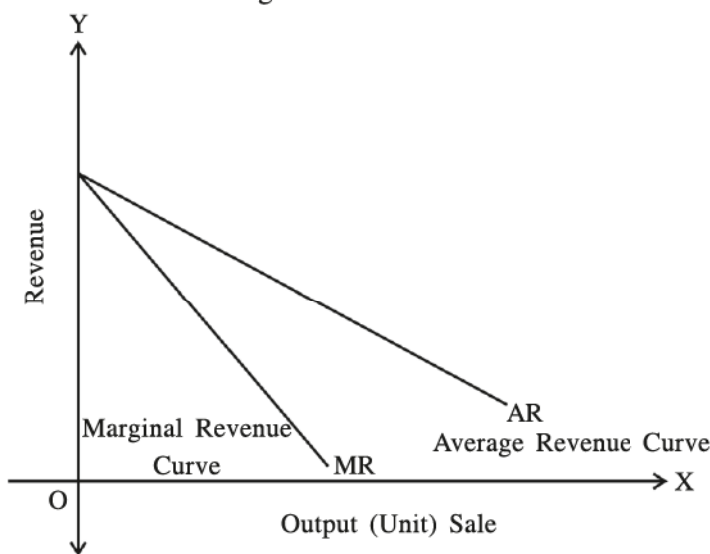
5.9 Revenue Curve in Perfectly Competitive Market

upward going curve, which was 45° angle at a zero point. This curve indicates that the sale of goods increases total revenue also increases at equal rate, therefore the slope of total revenue curve is positive and equal proportion :

5.8 Total Revenue, Average Revenue and Marginal Revenue under Imperfectly Competitive Market

A situation where perfect competition is absent, it is a case of imperfect competition. Monopoly, duopoly, oligopoly, monopolistic competition are examples under this market. Mainly monopoly and monopolistic market where seller has to reduce the price in order to sell more units. It means to increase his demand with the increase in sale the total revenue increases at a decreasing rate. As a result, there is a difference between the Average Revenue and Marginal Revenue. Due to decrease in price, Average Revenue curve slope downwards from left to right. For more sale of product it is necessary to decrease price and due to that Marginal Revenue also decreases.

With the decrease in price Average Revenue and Marginal Revenue also decreases but the decrease in Marginal Revenue is rapid in comparison to Average Revenue therefore Marginal Revenue curve is below Average Revenue curve which can be seen from diagram :



5.10 Revenue Curve under Imperfect Competition

In the diagram, revenue curve of a firm is shown we can see three things in it. (1) In perfectly competitive market, firms Marginal Revenue and Average revenue is constant and same due to that it can be shown through one line (curve) DD only. All points on DD curve show. Average Revenue = Marginal Revenue. (2) Average Revenue and Marginal Revenue curve is parallel to OX-axis shown by DD curve, here Average Revenue and Marginal Revenue curve converted into one another and the slope of curve is zero. (3) Total Revenue curve or Right to increasing

In the diagram it is shown that Average Revenue curve slope downwards from the left to the right direction to sell more, price is reduced due to that in comparison to Average Revenue, Marginal Revenue decrease rapidly and therefore Marginal Revenue curve lies below the Average Revenue curve for rapid decrease in Marginal Revenue is that to increase sale when price is reduced, it is applicable to all earlier units also.

Exercise

1. Choose correct option for the following from the options provided :

- (1) How is Average Cost curve shaped ?
(A) Hockey-stick (B) U (C) V (D) Square
- (2) Which cost cannot be measured ?
(A) Real cost (B) Monetary cost (C) Opportunity cost (D) Long run cost
- (3) When production is zero then which cost is positive ?
(A) Monetary cost (B) Average cost (C) Variable cost (D) Fixed cost
- (4) Which cost has direct relation with the production units ?
(A) Fixed cost (B) Variable cost (C) Average cost (D) Marginal cost
- (5) In which market, Average Revenue and Marginal Revenue are same ?
(A) Perfect Competition (B) Monopoly
(C) Monopolistic Competition (D) Oligopoly
- (6) How is the slope of fixed cost curve ?
(A) Negative (B) Positive (C) Parallel to x-axis (D) Parallel to y-axis

2. Answer the following questions in one sentence :

- (1) Why does the average fixed costs decrease with the increase in production ?
- (2) Give formula of Marginal cost.
- (3) What do you mean by fixed cost ? How is the fixed cost curve ?
- (4) Which concept of revenue can be known as price ?
- (5) What do you mean by Marginal Revenue ?
- (6) What do you mean by short run ?
- (7) What is opportunity cost ?
- (8) What is monetary cost ?
- (9) What does the firm get when marginal cost is less than Marginal Revenue ?
- (10) What is real cost ?

3. Answer the following questions in short :

- (1) What do you mean by short run ?
- (2) What is the meaning of average fixed cost ? Give example.
- (3) 'All costs are variable in the long run.' Explain.
- (4) Give meaning of total cost and total revenue.
- (5) Why is the revenue curve negatively sloped in imperfect competition ?

4. Answer following questions to the point :

- (1) Give the meaning of fixed cost and explain with the help of diagram.
- (2) Give the meaning of variable cost and explain with the help of diagram.
- (3) State the limitations in measuring opportunity cost.

5. Answer the following questions in detail :

- (1) Explain different concepts of the cost of production.
- (2) Explain with diagram the inter-relationship between average cost and marginal cost.
- (3) Explain Average Revenue and Marginal Revenue with the help of diagram in perfect competition market.
- (4) Explain Average Revenue and Marginal Revenue with the help of diagram in imperfect competition market.

Glossary

Firm	: Unit, producing goods and services is known as firm. Firm is an economic unit, which produces and sells with the motive of maximum profit.
Cost of Production	: Production cost refers to the expenditure increase by a producer to produce goods and services in monetary terms.
Real Cost	: Real cost is a cost increased during production process which includes the fatigue, boredom, dissatisfaction, mental tension, physical pain of labour capitalist, land owner and entrepreneur. This cost is difficult to measure.
Monetary Cost	: All the expenses increased in the form of money for production of goods is monetary cost.
Opportunity Cost	: The best alternative whose production is left out and due to that amount of money value left is opportunity cost of that commodity.
Fixed Cost	: With the increase or decrease in production, there is no change in cost is known as fixed cost. Fixed cost does not have any relation with unit of production.
Variable Cost	: With the change in quantity of production, cost also changes. With the increase in production, it increases, with decrease in production, it decreases and with zero production it is zero. Variable cost has positive relation with unit of product.
Total Cost	: Sum of total fixed cost and total variable cost is equal to total cost.
Average Fixed Cost	: Average fixed cost is the fixed cost per unit of output which can be achieved by dividing total fixed cost by total production.
Average Variable Cost	: Average variable cost is the variable cost per unit of output which can be achieved by dividing total variable cost by total production.

Average Cost	: Average cost is cost of per unit of production. It is got from dividing total cost by units of production.
Marginal Cost	: With the increase or decrease of one unit in total production, whatever changes taken place in total cost is known as marginal cost.
Revenue	: The revenue of firm is its sale receipts or money receipts from the sale of a product.
Total Revenue	: Total money receipts of a firm from the sale of a given output is called total revenue.
Average Revenue	: Average Revenue refers to revenue per unit of output sold. It is found out by dividing total revenue by total units sold.
Marginal Revenue	: Marginal Revenue is the change in total revenue which results from the sale of one more unit of a commodity.
Short Term	: It is the period of time during which factors of production like machinery, plant etc. are fixed. We cannot increase it.
Long Term	: It is the period of time during which factors of production like machinery, plant etc. are variable.



6

Market

- Introduction
- 6.1 Meaning of a Market
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 - 6.11.5 Inter-Dependence
 - 6.11.6 Price Stickiness (Kinked Demand Curve)

Introduction

Generally, the place where there is purchase and sale of commodities and services is called a market. The concept regarding market in economics more extensive than the prevailing idea.

6.1 Meaning of a Market

The system through which the buyers and sellers get in contact with each other directly or indirectly for the sale or purchase of goods or services is called market.

According to professor Samuel, “Market is the functional system where the buyers and sellers contact each other to decide the price and the quantity of goods or services.”

6.2 Characteristics of a Market

Market has its own peculiar characteristics as follows :

6.2.1 Numerous Sellers and Buyers : It is mandatory to have buyers and sellers of goods and services in a market. The purposeful exchange made through them for goods or service is the process of purchase and sales. This process allows the sellers to gain maximum profit and the buyers to gain satisfaction from the product.

6.2.2 Goods and Services :It is necessary that there are goods and services available according to the demand and necessity. To gain maximum profit, the producers and sellers provide the products and services in various types and forms and try to attract the buyers towards them. While for their satisfaction the buyers tries to buy an ideal set of products and services.

6.2.3 Contact : The buyers and sellers come in contact via various means. The contact made can be either direct or indirect. Presently, the buyers and sellers come in contact via the following means :

(1) **Tele-Shopping :** Where the buyers themselves order the services or products through a telephone.

(2) **Online Shopping :** Where the buyers order the services or products which they select on websites via internet. Thus, by the means of tele-shopping and online shopping, the buyers and sellers can come indirectly in contact.

6.2.4 Price : At a given time the price of the product or service must be decided in the market. The price is decided according to the demand and the factors related to its supply. The price of products and services depends on the demand made by the buyers and the ability of the producers and sellers to supply them.

6.2.5 Information about the Market Situation : It is important that the buyers and sellers have information about the current market situation. So that decisions related to production, distribution and purchase can be taken during the times of recession, inflation, natural and man-made calamities.

6.3 Classification of Market

The market is classified in many ways. Market based on location, time, form of product, quantity of product, control and competition are the various types. Here we will study market based on location, market based on quantity and market based on competition.

6.3.1 Markets Based on Location : Are classified according to the geographical location where they are situated.

6.3.1.1 Local Market : The market where the products and services are produced and sold at the same place are called local markets. They are limited to the respective city or village. For example, Market for clay utensils.

6.3.1.2 Regional Market : When the selling of the products and services is limited to a region or state, then is called Regional Market. It means that the diverse markets in a state come under the category of regional market. These markets are spread in various regions of a state. For example, In Gujarat, the markets in Ahmedabad and Vadodara are regional markets. Eg. 'Ghari' of Surat, regional films, regional books, etc.

6.3.1.3 National Market : When the products and services are purchased and sold throughout the country, then the market is called National Market. This market is spread throughout various states of nation. Eg. Dairy products, Sari market, Hindi novels.

6.3.1.4 International Market : Its also called Global Market. This market is extended to various country of the world. The sales and purchase in this market is generally referred to as 'Import-export'. Eg. Mobiles Phones, English novels etc.

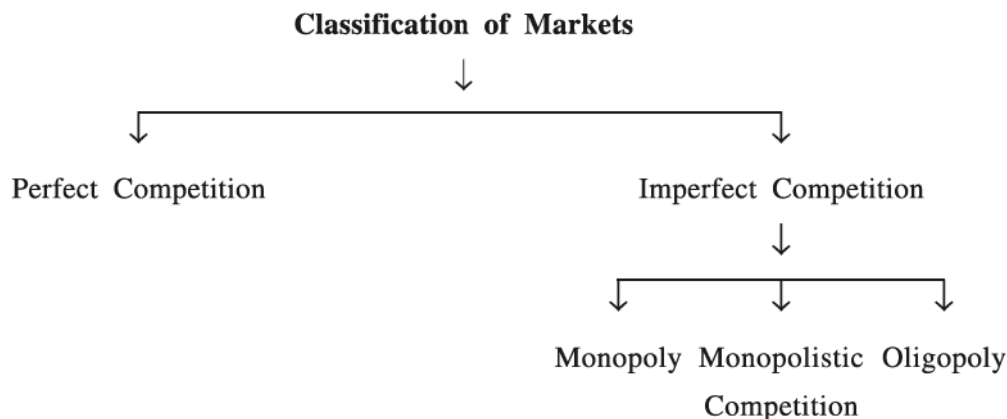
Due to new inventions, better transportation and communication facilities, cold-storage facilities, there is a change in the classification based on the location and geographical area. The same items and services can be of both regional and national market simultaneously.

6.3.2 Market Based on Quantity : The market based on quantity is classified into two main classes as follows : (1) Wholesale market (2) Retail market

6.3.2.1 Wholesale Market : Here the sales and purchase of items is done on a large scale. The wholesale traders buy the wholesale goods from the market and sell it to the retail traders. This way the retail traders become buyers while the wholesale traders are an important link between the buyers and the producers. For example, Wholesale grain market.

6.3.2.2 Retail Market : The sales and purchase are at a small scale in this market. Thus the retail traders become an important link and provide the goods and service to the customers. The retail traders buy the goods and service large scale and then sell them to the customers on a smaller or retail scale according to their demand and needs.

6.3.3 Market Based on Competition : Normally the market based on competition is classified on the basis of number of sellers and buyers. Of which the market of sellers is more important. The types are : perfect competition, monopolistic competition, oligopoly. The two major classes of market based on competition are : Perfect competition and imperfect competition.



6.4 Perfect Competition

Perfect Competition : Perfect competition market is an ideal market. It is only possible theoretically, not practically except the agricultural sector. This market is rarely observed, because the terms for establishing perfect competition are not met that easily. In economics, the study of perfect competition is very important. As this helps in understanding the characteristics and behaviour of other market based on monopoly, monopolistic competition, oligopoly.

6.4.1 Perfect Competition : Definition

(1) **According to Mrs. Robinson :** Perfect competition exist where the demand of product of the producer totally depends on its price.

(2) **According to Prof. Leftwich :** Perfect competition is a market system where there are many firms that sell identical products, with no firm large enough that can influence the market price.

6.5 Characteristics of Perfect Competition

6.5.1 Numerous Buyers and Sellers : This market has large number of buyers and sellers. Of these numerous sellers, a single seller is a very small part of the market. Due to which he cannot control or monopolize the wholesale market, neither can he influence the market price. e.g. : In a wheat farm, the increase or decrease in production of a single far will not affect the total production of the wheat. Thus, being a very small part of the market, the seller cannot influence the market price.

Similarly, the buyers also are numerous, so they also cannot influence the market price. Therefore here the market price depends only on the factors like demand and supply.

6.5.2 Identical Products : Identical products means the products having similar features, form, shape, colour, taste, weight, quality, etc. The products being similar in major aspects are referred to as identical or similar products. Therefore, they can be taken as substitutes of each other.

In this market, the products being identical, the producers or sellers cannot set different prices on the identical products, as the buyers are not ready to pay different prices for products having similar characters and quality.

6.5.3 Free Entry and Exit of Firms : Here there is no restriction on the entry and exit of the firms. When the firms are gaining abnormal profits, newer firms are free to enter the market and similarly, when the firms are suffering from abnormal losses, they are free to exit the market.

The free entry and exit of the firms is seen for a temporary time period. For a very short time the firms enters in the market being attracted by the profits and exits from the market suffering losses. But for a longer time period if the market in the situation of normal profits, there is less movement of firms. Because when the industry reaches at a normal profit, there no attraction to gain higher profits. And in the case of normal profits, the firms don't exit the market as they are not suffering any losses.

6.5.4 Perfect Knowledge of the Market : The producers, buyers, sellers have the complete knowledge of the market including product availability, product price etc.

The producers or sellers are in knowledge of the price at which the other producers or sellers are selling the product. They also are aware about the quality of the identical or substitute product. Thus, in this market a seller cannot charge different prices for identical products.

The buyers also know the price of the products and its quality, so that the seller cannot demand different prices from them. Thus in a perfect competition, the buyers, sellers and the producers are aware of the prices and the quality of the products, due to which the market has perfectly elastic demand curve.

6.5.5 Mobility of Factors of Production : The four factors of production, namely : land, capital, labour, entrepreneur are dynamic and mobile in physical, professional and usage point of view.

In perfect competition, the price is same for identical products. Similarly the price (compensation) of the factors remain same. To refrain from shifting of compensation from low to high due to dynamic and mobile, nature of the production equipment, the firms are uniformly compensated.

6 5 6 No Transportation Expenses : There are numerous buyers and sellers in perfect competition. The expenses of transportation are nominal as compared to the total expense, so are not counted. Thus considering the transportation expense to be zero, makes this an important characteristic of the perfect competition.

6 6 Monopoly

The economists consider the 'Perfect Market' and 'Monopoly' as two completely opposite theories. Monopoly is an imaginary concept. The monopoly observed is in reality imperfect monopoly.

Monopoly has originated from the Greek words, 'Monos' which means 'Single' and 'Polein' means 'Seller'. So, Monopoly means the market having one seller.

6 6 1 Monopoly : Definition

1 According to Prof. Chamberlin : "When the product supply is controlled only by an single enterprise, it is Monopoly."

2 According to Prof. Stigler : "Only one enterprise is the seller of the goods or products."

6 7 Characteristics of Monopoly

6 7 1 Only one Producer or Seller and Numerous Buyers : There is only one seller or producer of the product and goods, who controls the supply of the product. There is no competition in the market as there is only one seller, allowing the seller or the producer to control the price of the product. The producer or seller can decide the price of the product so known as the 'Price Maker' of the market.

When there are countless buyers in the market, the importance of a single buyer becomes negligible. There is competition seen between customers in monopoly. The buyers thus cannot affect the price of the product.

6 7 2 Absence of Substitute Goods : There is absence of substitute goods in Monopoly. But, as in reality there is imperfect monopoly, there is absence or ignorance of the close substitutes. There may be a rare possibility or similar product available. For example, If while buying a railway ticket from a specific company, for a specific time, to a specific location the ticket is unavailable then there is no possibility of having a similar or substitute ticket to the location. But one can try those possibility to travelling by airplane on the same time, to the same location.

6 7 3 Restriction Over the Entry of New Firms : There are different forms of monopoly in the market. Monopoly means the existence of only one seller. It is possible to end the monopoly but being a difficult process, the seller can sustain his monopoly for a longer duration. Due to absence of competition, the seller controls the price and gains super normal profits.

Even though there is super normal profit due to monopoly, the other firms can not easily enter the market. The monopoly restricts newer firms by factors like natural, law, skills and experience.

6.7.4 Control Over the Price or Sales : To gain maximum profits, the seller controls the supply of the products. But the seller cannot control both the price and the sales of the products. To sell less units or products, the firm sets higher prices, while to sell more units of products the firm must set lower price of product. To sell large number of units of product with high price is not possible.

6.7.5 Super Normal Profit : In a monopoly market, producer and seller are the same. The seller can gain super normal profits, without any competition in both shorter and longer time periods. The seller can put high price on the producer as compared to the total expenses thus gaining super normal profits.

6.7.6 Price-Discrimination : Due to absence of any competition, the seller can set different prices on the same product, depending on its use or form. The seller thus can gain higher profits using the concept of price discrimination, e.g. Doctor.

6.7.7 Firm is Industry : Ideally a firm is the independent unit of production, while the industry is the collection of the firms producing same products. However in monopoly, the producer and the seller are same, so the collection of firms can also be considered a single firm.

6.8 Monopolistic Competition

In reality, market are neither perfectly competitive markets nor pure monopoly markets. A mixed form of both is found. There is coexistence of partial monopoly and partial perfect competition in market, which is known as Monopolistic Competition. The major types of market observed is monopolistic.

6.8.1 Monopolistic Competition : Definition

(1) **According to Prof. Chamberlin :** “Perfect competition and perfect monopoly coexist in a market, known as Monopolistic Market.”

(2) **According to Smt. Robinson :** “If each firm establishes monopoly and also competes at the same time, the market is called ‘Imperfect Competition.’”

6.9 Characteristics of Monopolistic Competition

6.9.1 Large Number of Sellers and Numerous Buyers : There are numerous sellers in Perfect Competition. In monopoly there is only one seller, while in monopolistic competition there are many sellers. It means that there are neither numerous sellers, nor there is only one seller, but there are many sellers. Due to this in monopolistic competition the factor competition becomes important.

The buyers being numerous in the market, they cannot individually influence the market. Also they cannot affect the price of the product.

6.9.2 Product Differentiation : This is a distinct characteristic of monopolistic competition. It means that a product is different from another product in terms of form, quality and nature. When a

producer produces a product, there a possibility that there are minor differences in the products in terms of form, fragrance, taste, shape, weight and quality. Due to these minor differences, the products can be called different.

6.9.3 Free Entry and Exit of Firms : The free movement of firms means the unrestricted entry and exit of firms. The super normal profit attracts the firms freely in the market. Even when the firms suffer losses, they are free to exit from market.

The free entry and exit of firms occurs only for short period of time. This means, that the firms enter freely by attraction of super normal profit and exit freely when they suffer losses. When there is normal profit, the free entry and exit of the firm decreases and stops. The firms are not attracted by the normal profit so the firms do not enter in the market. Similarly the firms in the market do not exit as they are not suffering losses.

6.9.4 Selling Cost : The expenses done for selling the product are called selling cost. The selling cost includes the packing, making the product attractive, sales taxes, transportation, expenses given to wholesale and retail traders, showroom expenses, a specific amount expended for sales, prizes, gifts and the most important being the advertisement cost. The selling cost does not include the production expenses.

The selling cost is a typical characteristics of Monopolistic Market. This is not seen in monopoly or perfect competition. In this monopolistic competitive market, the sellers try to attract the consumers through the selling expenses. The product difference in the market gives a particular identity to a product. So there can be possibility of selling cost. For example,. Mobile Phones, Soaps etc have different advertisements.

6.9.5 Competition Other than Price : Monopolistic market has competition of price and also competition other than price. The sellers keeping the price fixed, try to attract the consumers by advertisement and compete by modifying the quality. The sellers try to attract the consumers and compete on the basis of factors other than price.

6.9.6 Imperfect Knowledge Regarding the Market : The buyers and sellers do not have the complete knowledge related to the market. They are not aware of identical and substitute products. So the price of identical or substitute product are either high or low, resulting into different price of substitute products.

There are many firms producing identical or substitute products. The firms compete by creating a new identity of the product and thus establishes monopoly like situation. This creates a monopolistic competition.

6.10 Oligopoly

Oligopoly has originated from the Greek words ‘**Oligos**’ which means ‘Few’ and ‘**Pollein**’ which means ‘Sellers’. So, Oligopoly means the market having few producers.

Oligopoly includes the market having few producers which sell identical or substitute products. There is extreme competition in this market.

6.10.1 Oligopoly : Definition

(1) **According to Prof. Stigler** : “Oligopoly is the market in which the firm decides its policy, according to the behaviour of competitors.”

(2) **According to Prof. Baumol** : “Oligopoly is the market in which even a small number of sellers out of the total less sellers are effect enough to affect the price of the product.

6.11 Characteristics of Oligopoly

6.11.1 Few Sellers and Numerous Buyers : The number of sellers and producers is less in the market. The number of firms is limited. The number of firms ranges from more than two to less than ten or twenty. Due to this a few number of sellers have a monopoly control over the market.

The number of buyers is numerous in the market, so the importance of a individual buyer is negligible. Due to which the buyers can not affect the market price.

6.11.2 Similar or Substitutable Products : There is sale of identical or substitute products in oligopoly. When the firms in a market, produce and sell identical or substitute products, it is Oligopoly. For example, products like salt, crude oil, tea, etc. When traders produce indential products the market follows imperfect oligopoly. For example, Cold drinks, motorcycle. etc.

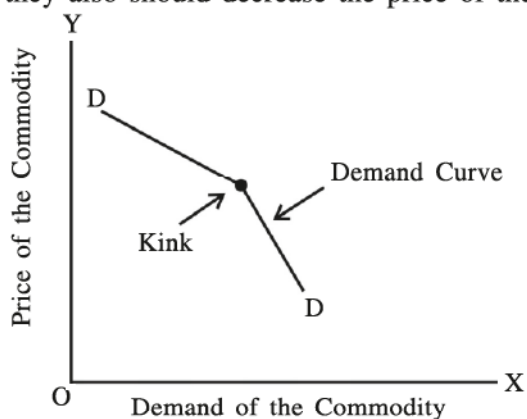
6.11.3 Entry or exit of Firms : In the market of oligopoly, the entry and exit of firms is free or regulated according to the type of oligopoly followed. If there is free oligopoly in the market, then there is free entry and exit of the firms, while the oligopoly is restricted, then the entry and exit of firms is regulated.

6.11.4 Selling Cost : The expenses done for selling the product are called selling cost. The selling cost includes the packing, making the product attractive, sales taxes, transportation, expenses given to wholesale and retail traders, showroom expenses, a specific amount expended for sales, prizes, gifts, and the most important being the advertisement cost. The selling cost does not include the production expenses.

There is extreme competition in oligopoly. So, the selling cost becomes an important factor of the market. The seller try to attract the consumers through the selling expenses. The product difference in the market gives a particular identity to product. So there can be possibility of selling cost. For example, advertisements of Television, Car, etc.

6.11.5 Inter-Dependence : The sellers and producers are very few in number in this market. The sellers or producers can thus easily gain the important information about other sellers or producers. The sellers and producers special focus on the quality and type of the product to attract the consumers. For example, Television, Car etc. producers or sellers. So the firm decides the price, quality or type of its product, based on the behaviour of the competitors and is dependent on them.

6.11.6 Price Stickiness (Kinked Demand Curve) : The number of firms is less and they are interdependent on each other. If any one firm decreases the price of the product, then according to the law of demand, due to comparatively cheaper price of the product there is more demand of the product in the market of that particular firm as compared to other firms. There is a decrease in the demand of the products sold by other firms. If the competitive firms do not wish this situation, then they also should decrease the price of the product to stay in the competition. At the end, the price of



6.1 Kinked Demand Curve

the product reaches at a nominal level, and it becomes impossible to reduce the price further.

On the other hand, if the firm increases the price of the product then the demand of that product decreases, and the competitive firms are profited. Thus, as the nominal price is resistant to change, the demand curve becomes kinked.

Exercise

1. Choose correct option for the following from the options provided :

- (1) How many types of markets are there according to location ?
 (A) One (B) Three (C) Four (D) Seven
- (2) 'Negligible Transportation Expense' is the characteristic of which market ?
 (A) Perfect Competition (B) Monopoly
 (C) Monopolistic Competition (D) Oligopoly
- (3) 'Product Differentiation' is the characteristic of which market ?
 (A) Perfect Competition (B) Monopoly
 (C) Monopolistic Competition (D) Oligopoly
- (4) In which market 'Firm is an industry' ?
 (A) Perfect Competition (B) Monopoly
 (C) Monopolistic Competition (D) Oligopoly
- (5) 'Selling Cost' is an important characteristic of which market ?
 (A) Monopoly (B) Bilateral Monopoly
 (C) Monopolistic Competition (D) Perfect Competition

- (6) Inter-dependence is seen in which market ?
 (A) Oligopoly (B) Monopoly
 (C) Monopolistic Competition (D) Perfect Competition
- (7) 'Price Stickiness' is seen in which market ?
 (A) Perfect Competition (B) Oligopoly
 (C) Monopolistic Competition (D) Monopoly
- (8) Which market restricts the entry of firms ?
 (A) Simple Competition (B) Perfect Competition
 (C) Monopoly (D) Monopolistic Competition
- (9) 'Identical Products' is a characteristic of which market ?
 (A) Perfect Competition (B) Monopoly
 (C) Monopolistic Competition (D) Intensive Competition
- (10) 'Super Normal Profit' is a characteristic of which market ?
 (A) Monopolistic Competition (B) Oligopoly
 (C) Monopoly (D) Perfect Competition
- (11) Kinked demand curve is possible in which market ?
 (A) Monopolistic Competition (B) Oligopoly
 (C) Monopoly (D) Perfect Competition

2. Answer the following questions in one sentence :

- (1) Define : Market.
- (2) What is regional market ?
- (3) What is national market ?
- (4) What is Perfect Competition ?
- (5) What is Monopoly ?
- (6) What is Selling Cost ?
- (7) Define : Product differentiation.
- (8) Define : Oligopoly.
- (9) What is price taker ?
- (10) Which market has restriction of entry of new firms ?

3. Answer the following questions in short :

- (1) With respect to Perfect Competition, explain 'Transport Cost'.
- (2) Explain, in a monopoly market firm and industry are the same.
- (3) What is Monopolistic Competition ?
- (4) Explain : Price Discrimination.
- (5) Explain meaning of inter-dependence.

4. Answer the following questions in brief points :

- (1) Explain any three characteristics of Monopolistic Competition.
- (2) Explain any three characteristics of Oligopoly.
- (3) Explain : 'Price Stickiness'.
- (4) Classify the market according to competition.
- (5) Give difference between Perfect Competition and Monopoly.
- (6) Give difference between Monopoly and Monopolistic Competition.

5. Answer the following questions in detail :

- (1) Explain : Market and its characteristics.
- (2) Explain : Classification of Market - According to location and quantity.
- (3) Explain : Characteristics of Perfect Competition.
- (4) Explain : Characteristics of Monopoly.
- (5) Explain : Characteristics of Oligopoly.

Glossary

Perfect Competition	:	A competitive market where there are numerous buyers and sellers of a commodity such that no single buyer or seller can influence the price is called perfect competition.
Monopoly	:	A market where there is a single seller of a commodity.
Monopolistic Competition	:	A market where there are many sellers of a commodity selling close substitutes such that they have a monopoly of their own commodity but compete with each other in the market.
Production Process	:	The process of conversion of shape, form, nature etc. of a produce/resource in order to increase its utility and usefulness is called production process.
Market	:	'The direct or indirect interaction between buyers and sellers of goods and services with the objective of exchange is called market.'
Price Taker	:	In a perfectly competitive market, a firm cannot influence the market price by its own action and thus can sell any amount at a price given by the market. Such a firm is called a price taker firm
Price Maker	:	In monopoly, a firm decides its own market price and has full control over it as it faces no competition. Such a firm is called a price maker firm.
Super Normal Profit	:	In a market, when a firm's average cost is less than its average revenue, it is a situation of supernormal profits. ($AC < AR$)

Price Discrimination	: The policy of a monopolist to charge different prices from customers of different categories/ types in order to increase his demand is called price discrimination.
Product Differentiation	: Under monopolist the practice of a seller to differentiate one's commodity in shape, colour, size, taste, fragrance, etc. to compete with other sellers is called product differentiation.
Selling Cost	: The cost incurred for selling a product.
Interdependence	: Under Oligopoly the number of sellers or producers is very few so they strive to gather information about other sellers or producers. Sellers compete on the basis of price or product. And, they decide on price or variety based on the actions of the competitor. This is called interdependence.
Price Stickiness	: A situation when the price of a product becomes firm or sticky at a particular level is called price stickiness.
Mobility of Factors of Production	: When factors of production move between occupations, it is called mobility of factors of production.
Firm	: An independent unit producing or selling a goods or services.
Industry	: A group of firms selling similar goods.



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	7.4.5.4 Road Network
	7.4.5.5 Railway

Introduction

India is a country of rich cultural diversity; it is the largest democracy in the world demonstrating unity among diversity of various languages, castes, creed, religions, cultures, traditions and so on. Thus India has a unique identity.

India was named 'Bharat' in the ancient times after the name of the son of King Dushyant and his queen Shakuntala.

The country was extremely prosperous and known for its agriculture, traditional crafts and trade; which attracted many foreigners for the purpose of trade.

However, the foreigners who came for trade started ruling over us in order to exploit our rich resources and thus they ruined our ancient economic and cultural heritage both. Between 1526 to 1858 that

is between the 16th and 19th centuries, the Mughals ruled the entire nation or some regions. Besides, the French, the Portuguese and the Dutch also ruled over some parts for some time.

And, finally the British established their rule over India almost from 1757 to 1947. The period from 1757 to 1858 is known as the period of the East India Company 'raj' (rule) as this company of British origin came here to trade but also established its rule and later from 1858 till the midnight of 14th August, 1947, the British established its government in India.

7.1 Ancient India

The Indian civilization which is known to have emerged from the influences of the invasion of the 'Aryan' tribe and Indus valley civilization and which is also called the 'Harappan' civilization is identified as the ancient age and the remains of this civilization were first found at 'Harappa' and 'Mohenjo-daro'. In Gujarat we see the remains at Lothal and Dholavira.

This civilization gives evidences of organization, prosperity urban planning and development. From the view point of manufacturing activity, India was known for its cloth, muslin, jute, indigo from pre British times. With the British invasion India got tea plantations and even today India is known for her tea exports. In a way, before the British period India was known to have been rich in agriculture, industry and civilization.

Let us look at some of the important economic aspects of India in the pre British and the ancient time.

7.1.1 Occupational Structure : Ancient India was predominantly an agricultural nation. The economy was mainly rural economy. However, some basic industries also existed and the agricultural and industrial sectors were both prosperous.

7.1.1.1 Agriculture : Indian agricultural sector was prosperous and variety of crops were grown. Villages were self reliant and basic necessities like grains, vegetables, fruits, clothes, shoes etc. were produced in the village economy as well as cattle rearing and dairy farming were also undertaken. Thus, village life was happy.

7.1.1.2 Industries : According to historian Rai Chaudhary, prior to 19th century, India was a prominent centre of some items of manufacturing. India was known for cotton, jute, muslin, wool, idols making, indigo, terracota, earthenware etc. some of these goods were also exported.

7.1.1.3 Services : Even before 600 B. C., India had system of minting metal coins. She had a wonderful system of town planning and sewage, stable political system, unity among people. Because of these, trade in agricultural goods and manufactured goods was prosperous. Evidences of these are found at Lothal.

7.1.2 National Income/Economic Prosperity : According to historian Angus Maddison, India was extremely prosperous with share of 25% of the world wealth during the time of Maurya dynasty. During this time, most regions of the geographical area of present India were under one rule. During the Mughal rule, India commanded almost 90% of the wealth of southern Asian region and high taxes and excise were also generated. During the rule of Aurangzeb around 1700 A.D. the national income of India was 10 crore Pounds. Actually the foreigners came to India for her riches only.

Thus the ancient age was a golden age.

7.2 Indian Economy before Independence (During the British Rule)

The East India Company and later the western rulers (French, Dutch, Portuguese and English) came to India getting attracted by her riches. India had wealth, rich scriptures and cohesive social set up. India was famous for trade in cotton, muslin, indigo, spices, and metallurgy (copper, bronze, and brass, and others).

However, during this time there were conflicts among the foreign rulers also to establish their own power over India and they used armed power also. When the British established dominance, our resources were exploited, poverty increased and the ancient riches of India started eroding. However, Indian economy also attained the following:

7.2.1 Railway : British set up the railway infrastructure in India and with the first rail that ran between Boribandar (present day CST) and Thane on 16th of April, 1853. By 1947, India had rail network of 53,000 km. benefiting a population of 68lakhs.

7.2.2 Roadways : The British also created a good length of roads in India. They set up the Public Works Department (PWD) under which significant basic utilities were created. By the end of 19th century, there were a total of 2,78,420 km of roads which increased to 4,47,105 by 1943 of which 32% were concrete ('pukka') roads and 68% were 'kachcha' roads.

7.2.3 Banks : Private sector banks came into being in India from 1770 and by 1946 there were more than 700 banks in India. The Reserve Bank of India (RBI) which is the apex bank today, was set up in 1935.

7.2.4 Social Structure : Certain wrong social practices were abolished during the British rule, For example, prevention of female infanticide, sati pratha etc.

7.2.5 Agriculture : Indian agriculture suffered from high revenues, the system of 'Zamindari' (landlordship) and other acts of the British. There was exploitation of several types and poverty in this sector started increasing. To give an example, after industrial revolution in Britain, the British made Indian farmers grow more indigo to fulfil the need of their textile industry. However if farmers had taken a loan to grow indigo and incurred losses, the British government did not waive off their loans and the farmers started incurring and accumulating debts.

7.2.6 Land Revenues : The East India Company got the rights to collect land revenues from the kings in India and with that also got the rights to collect land revenues from owners of farming lands. Later on, the British government collected land revenues from the farmers through the Zamindars. The government punished the farmers who failed to give revenues by confiscating their land, by charging fines and so on. Land revenues were as high as half of the produce of farmers.

7.2.7 High Rates of Taxes : According to Dadabhai Naoroji's calculations in 1876, the rich paid about 8% of the national income as taxes while the Indians who were poor were made to pay 15% of the national income as taxes.

7.2.8 High Rates of Excise and Customs : High excise was collected on matches, sugar, steel, and silver and all such commodities. Though salt was easily available in India, the British termed as illegal the production of salt by Indians on sea shores and they monopolised salt trade, imported salt to India by levying high custom duties and thus made it an expensive commodity for poor Indians.

To protest against the high excise duties on salt, Gandhiji started the salt satyagraha with the Dandi march.

High duties (upto 15%) were imposed on cotton cloth exports from India so that Indian cotton industry received a setback. Whereas, the cotton cloth imports from Manchester in England came to India at much lower import tariffs of only about 2.5%. The British wanted to export India's long staple cotton to England and sell its manufactured cloth in India.

Thus, India's raw materials were exploited so that British industry could thrive at the cost of Indian industry.

7.2.9 Industrial Policy : The period from 1750 to 1830 was the period of industrial revolution. East India Company had by that time started establishing rule in India and in 1858, the British government established its rule. The British government adopted a policy that made the Indian investor lose confidence. The development of Indian industries was lopsided in character in the sense that only some light and consumer goods industries were started and no attention was given to the machine-manufacturing and heavy engineering and heavy chemical industries and other basic and key industries. The policy was to send raw materials from India to Britain, and sell goods made in Britain to India.

7.2.10 Economic Exploitation : In order to benefit their own economy, the East India Company and later the British government, adopted policies which exploited Indian resources and promoted British industries. Indian agriculture was also exploited by high land revenues.

7.2.11 Exploitation of Artisans : The East India Company exploited artisans by obtaining goods from them at up to 15% to 40% lower prices and sold them in the world at higher prices and made high profits. Besides, after the British government rule, they started selling in India cheap goods manufactured in England and ruined the small scale industries of India.

7.2.12 Investment Pattern : The British made only those investments in India which benefitted Britain. For example, Railways and road networks were created to help movement of raw materials and goods for their industry. Investment in education was made to educate personnel to run the British administration and Indians were prevented from getting technical education. They started colleges for medicine and civil engineering in India for their benefit. They needed civil engineers for public works departments in India and in Britain. They did not promote studies in science and technology in India. Thus they made selective investments in India.

7.2.13 Payment Burden : Various payments were made to British from India's income besides huge salaries of British personnel. These included home charges. There was a huge amount of money which India Paid towards administration, maintenance of the army, war expenses, pensions to retired officers and other expenses accrued by Britain towards maintenance of her colony. These were known as "Home charges" and were paid for almost entirely by India.

The Home charges were made of three components viz, Interest payments for debts incurred in maintaining Indian colony, interest on the railways and civil and military charges.

Finally when British left India in 1947, Indian agriculture, industry and trade were devastated. A country which was once highly prosperous, was impoverished.

7.3 Indian Economy after Independence

Immediately after independence, Indian economy faced some challenges for development. India today exhibits characteristics of a developing country with some areas of lower development and some showing much improvement. Thus in current times, we look at characteristics of India as a less developed and as a developing nation both.

7.3.1 Per Capita Income : According to Human Development Report, the per capita income of India in 2013 at purchasing power parity was \$ 5,150 which was lower than that of developed countries but also lower than many developing countries like China (\$11,477) and Sri Lanka (\$9,250).

This is shown in the table below.

Some Comparative Statistics for PCI(by Purchasing Power Parity)	
Country	PCI (in Dollars)
● Norway	63,909
● USA	52,308
● Germany	43,049
● England	35,002
● China	11,477
● Sri Lanka	9250
● India	5150
● Pakistan	4652
● Bangladesh	2713

Changes in India's PCI in Last few Years		
Year	PCI at Current Prices (in ₹)	PCI at Constant Prices (in ₹)
2011-12	64,316	64,316
2012-13	71,593	66,344
2013-14	80,388	69,959
2014-15	88,533	74,193

Source : Compiled from Economic Survey of India for Various Years

Source: Human Development Report (2014)

7.3.2 Agriculture : India is an agrarian nation. The share of agricultural sector in employment has gradually declined but it is still relatively higher depicting lower economic development. Developed nations have lesser percentage employment in agriculture and higher in the industrial and service sectors.

At the time of independence 72% of the population was dependent on agriculture which declined to 58% in 2001-02 and to 49% in 2013-14 (Human Development Report).

7.3.3 Industry : The contribution of industrial sector in employment and national income has increased over time; however, India is called a completely industrialized nation from the development criteria. The share of industrial sector in employment was 10.6% in 1950-51, which increased to 18.2% in 2001 and further to 24.3% in 2011-12. Its share in national income was 16.6% in 1950-51 and was 26% in 2013-14. (Source: CSO) Besides, the industrial sector contributes 2/3rd of the export earnings in the present times. Thus, though the industrial sector is progressing, India cannot be called a completely industrialised nation.

7.3.4 Service Sector : The share of service sector in employment in 1951 was 17.3%, in 2001 it was 25.2% and in 2011-12 it was 27%. The share of service sector in national income (GDP) in 1951 was 30.3%, in 1980-81 it was 38%, in 2000-'01 it was 50.4% and in 2014-15 it was 52.7%. Such increasing share of service sector shows that India is moving fast on the path of growth and development.

7.3.5 Population Growth : The growth rate of population in India has characterized lower development. There has been an average annual increase of 1.5% in population after independence and it signifies population explosion. The population of India in 1901 was 23.84 crores, which increased to 36.1 crores in 1951, 102.7 crores in 2001 and further to 121.02 crores in 2011. Such high growth rate of population has remained a matter of concern.

7.3.6 Poverty : Indian economy is characterised by high levels of absolute poverty. Though percentage of population living below poverty line has declined over years it is still considered high. In 1973-74 percentage of population living below poverty line was 54.9% which declined to 45.3% in 1993-94, to 37.2% in 2004-05 and further to 21.9% in 2011-12.

7.3.7 Unemployment : Structural unemployment constitutes significant proportion of unemployment in India. In 1951, 33 lakh people were unemployed. According to NSSO (National Sample Survey Organization), in 1999-2000, 7.31% of the total population unemployed which increased to 8.2% in the 2004-05. However, this decreased to 6.6% in 2009-10 and further to 5.6 in 2011-12. In the rural areas, the proportion of disguised unemployment is higher. Disguised unemployment can not be exactly measured.

7.3.8 Human Development : Various human development indice measured by indicators like average life expectancy, literacy, gender ratios, and infant mortality rates and so on show that India stands at lower rank in human development. One such index is the Human Development Index and India's HDI in 2000 was 0.463, in 2010 was 0.547, in 2012 was 0.554 and in 2013 was 0.586. These measures on the HDI are considered very low and in 2013 India's rank was the 136th in a list of 187 countries, which is obviously very low.

7.4 Characteristics of India as a Developing Economy

Though some areas of Indian economy mentioned above indicate lower economic development, India cannot be called a less developed nation. Indian economy shows characteristics of a progressing economy, some of which are :

7.4.1 Growth Rate : The growth rate of the economy which is measured by the growth in national output year by year has increased for the Indian economy, especially after LPG. During the period between 1950-51 and 1990-91 the average annual growth rate was around 3.5%. However after the period of economic reforms in 1991, the average annual growth rate has remained above 6.8% which is an important achievement. After 2012-13, the growth rate has slowed down and in 2014-15, the average annual growth rate was less than 5%.

The Net National Income at factor cost (NNP_{FC}) at constant price level in the year 1950-51 was ₹ 2,69,724 crores which increased to ₹ 87,51,834 crores in the year 2013-14. Thus, in a period of 63 years, the NNV has grown by 18 times.

7.4.2 Changing Share of Various Sectors in National Income and Employment : As a nation starts developing, the contribution of its industrial and service sectors in national income and employment increases. It means that now people have to depend less on their traditional sector (agriculture) and with improvements in technology and capital formation they get employment in the relatively more productive sectors viz. Industrial sector and service sector. India's service sector has started growing significantly after the reforms of 1991. The following tables show the increasing share of industrial and service sectors in national income and employment.

Share of Various Sectors in NI

	1950-51	1990-91	2000-01	2014-15 (P)
Agriculture and allied activities	53.1	29.6	22.3	17.6
Industries	16.6	27.7	27.3	29.7
Services (excluding construction)	30.3	42.7	50.4	52.7

Source : Economic Survey (2014-15)

We observe that the share of agriculture in the National income has declined over the years and that of industrial and service sectors has increased.

7.4.3 Per Capita Income : The per capita income of India at constant prices in 1950-51 was ₹ 7,114 which increased to ₹ 39,904 in 2013-14. Thus, in a period of 63 years PCI increased by approximately 5.6 times.

Between the periods from 1950-51 to 1990-91 it increased by about 1.6 percent while after 1991, it increased by 5.5%.

We observe that the share of agriculture in the employment has declined over the years and that of industrial and service sectors has increased.

7.4.4 Level of Employment : In India, employment is reviewed in three sectors as :

7.4.4.1 Primary Sector : This sector includes agriculture and allied activities, dairy farming and animal husbandry.

7.4.4.2 Industrial Sector : This includes manufacturing, construction, mining, quarrying. In other words it includes all production activities.

7.4.4.3 Service Sector : It includes all activities pertaining to trade, banking, transport, information and broadcasting, health, education and so on.

Share of Various Sectors in Employment

	1951	1991	2001	2011-12
Primary/Agricultural Sector	72.1	66.9	56.7	48.9
Secondary/Industrial Sector	10.6	12.7	18.1	24.2
Tertiary/Service Sector	17.3	20.4	25.2	26.9

Source : Economic Survey (2014-15) Volume-II.

In India, year 1951, the contribution of primary sector in employment was 72.1 %, that of industrial sector was 10.6 % and service sector was 17.3 %. In 1991, the contribution of primary sector in employment was 66.9 %. Industrial sector was 12.7 % and service sector was 20.4 %.

While in year 2001, the share of primary sector in employment was 56.7 %, industrial sector was 18.2 % and service sector was 25.2 % and in 2011-12 the share of primary sector in employment was 48.9 % that of secondary sector was 24.3 % and service sector was 26.9 %.

Thus, it is seen that from 1951 to 2011-12, the employment has shifted from primary sector to industrial and service sectors.

7.4.5 Improvement in Basic (Primary) Utilities : India has shown significant improvement in provision of various utilities in the urban as well as in the rural areas like, electricity, water supply, roads, irrigation, transport, communication, health, education and such.

7.4.5.1 Irrigation : In 1950-51 only 22.6 m. hectare of land across the country was irrigated which increased to 63 m. hectares in 2012-13. Thus, about 45% of the total agricultural land has irrigation facilities in present times.

7.4.5.2 Literacy : The literacy rate which was 18.33% in 1951, rose to 73% in 2011 (Source : Economic Survey, 2013-14). In 1950s there were 20 universities and 500 colleges which increased to 719 and 35,000 respectively by 2013-14. This indicates rise in higher education.

7.4.5.3 Electricity : The electricity generation which was around 2300 MW in 1950-51 increased to 2,43,000 MW in 2011-12.

7.4.5.4 Road Network : In present times, India belongs to the list of countries with longest road network. It has approximately 48.6 lakh km. of concrete roads today.

7.4.5.5 Railway : Indian railway network is the fourth largest today with a length of 65,000 km

Thus India is progressing fast and is now a prestigious emerging economy. The per capita consumption of essential commodities has increased, progress is made in areas of science, research and technology development, average life expectancy has increased and so on.

In the International Comparison Programme (ICP) initiated by the World Bank, in 2011 India was identified as the third largest country after USA and China; while in 2005 India was at the 10th position.

Exercise

1. Choose correct option for the following from the options provided :

(1) Railway was started in which year in India ?

(A) 1847 (B) 1853 (C) 1901 (D) 1947

(2) In which year the Reserve Bank of India (RBI) was set up ?

(A) 1847 (B) 1857 (C) 1935 (D) 1947

- (3) According to Human Development Report of 2014, what was India's per capita Income ?
 (A) \$ 5150 (B) \$ 9250 (C) \$ 43,049 (D) \$ 52,308
- (4) In 2014-15 which sector contributed the maximum to national income ?
 (A) Agricultural (B) Industrial (C) Service (D) Foreign Trade
- (5) Which type of unemployment is found in India ?
 (A) Cyclical (B) Structural (C) Absolute (D) Relative
- (6) In 2011 what percentage of population got employment in agricultural sector ?
 (A) 49 % (48.9) (B) 55 % (C) 72 % (D) 27 %
- (7) Indian Railways stands at which rank in the largest railway networks of the world ?
 (A) First (B) Second (C) Third (D) Fourth
- (8) According to census of 2011, what was the percentage of literate people in India ?
 (A) 55 % (B) 62 % (C) 73 % (D) 88 %
- (9) In 2011-12 what was the percentage of poor people in India ?
 (A) 80 % (B) 55 % (C) 37 % (D) 22 %
- (10) Which of following is not a primary service ?
 (A) Education (B) Transport (C) Import-Export (D) Irrigation

2. Answer the following questions in one sentence :

- (1) When was the public works department set up in India ?
- (2) When was banking started in India ?
- (3) Which civilization originated in Ancient India ?
- (4) How much was the employment in agriculture in the year 2011-12.
- (5) Who prepares the Human Development Report ?

3. Answer the following questions in short :

- (1) What is meant by 'Home Charges' ?
- (2) 'India is predominantly an agricultural nation', Explain this statement.
- (3) State the export items in ancient India.

4. Answer the following questions in brief points :

- (1) Write a short note on : Ancient India.
- (2) Write a short note on : Progress of Railways in India.
- (3) Explain the tax policy of British Rule in India.
- (4) Describe the basic utilities of India.
- (5) Write short note on : Share of various sectors in National Income.

5. Answer the following questions in detail :

- (1) Explain the characteristics of India as a developing country.
- (2) Specify the state of Industries of ancient India.
- (3) Explain the state of Indian economy before Independence.
- (4) Explain the state of Indian economy after Independence.

Glossary

Occupational Structure

It is a structure of employment of people in various sectors in the economy viz. Agriculture, industry and service.

National Income

The value of all final goods and services (in all sectors) produced in an economy during a year.

Basic Utilities

Services which are primary to the development of a nation.

Excise

Excise is a one type of tax, which is imposed on people and firms of nation at the time of import and export of commodities.

Land Revenue

A tax on land holding.

Per Capita Income

It is the average share of national income per person in an economy. It is only a mathematical average and does not mean that in reality each person get that share. In reality, some get greater share than this average and others get lower. $PCI = \text{total national income} \div \text{total population}$.

Industrial Policy

Policy which frames rules and regulations for industrial development in order to fulfil goals and objectives of the economy.

Economic Exploitation

The overuse of resources of an economy for selfish benefits by an individual, firm or the state of the same country or of other country is called economic exploitation.

Social Structure

The formation of segments and linkages among these segments in a society.



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Introduction

The planners of independent India faced challenges of social and economic development. For this reason, they adopted the mixed type of economic system which laid greater emphasis upon socialist pattern of planning.

However, by the eighties, many experts felt that the strategies of planning adopted from 1947 to 1990 failed to attain the goals of economic growth and development as they proposed several state imposed regulations on economic activities. Besides, in the early nineties the international monetary organizations guided by the developed nations of the world imposed a precondition for providing further monetary assistance to India that India must reform its economic policies by reducing excessive controls on economic functioning. There was a severe balance of trade deficit and India had to borrow foreign exchange from international institutions. Balance of trade is an accounting statement showing a country's expenditure on imports and income from exports. Thus, since 1991, India reformed her economic policies for which necessary institutional and regulatory changes were also brought about.

8.1 Objectives of Economic Policy Reforms Since 1991

The changes brought about in economic policies since 1991 in order to steer a change in the economic system of India; from one which was highly regulated by the state to one which is more market oriented; as well as to reduce the extent of public sector in the mixed economic system came to be known as economic reforms. The objectives of these reforms were stated as under:

8.1.1 Increasingly encourage private and foreign investments in order to utilize India's abundant natural and human wealth in the process of economic development in a more productive manner.

8.1.2 Optimum and efficient allocation of the nation's resources.

8.1.3 Restrict expenditures of the state and channelize the resources recovered from disinvestment in public enterprises towards increasing utilities which enhance welfare of the people.

8.1.4 Increase domestic income, employment and export income of the country.

8.1.5 Increase competitiveness of the Indian economy.

8.1.6 Ensure steady economic growth and development of the Indian economy in the long run. In order to fulfil these objectives, systematic reforms in economic policy were initiated in 1991 which had three components :

- (1) Liberalization
- (2) Privatization
- (3) Globalization

8.2 Liberalization

Liberalization means increase in the freedom of private enterprise by allowing greater play of market forces and reduced interference by the state; in a way relaxing policy restrictions imposed on economic activity.

Increasing the role of private sector and market oriented processes in economic planning in place of state regulated economic processes in India's mixed economic system is called liberalization of Indian economy. In the process of liberalization,

- (1) there is a gradual decline in the controls imposed by the state in economic functioning,
- (2) the role of market forces of demand and supply increases in economic decision making,
- (3) the private sector is systemically allowed to enter the investment areas reserved for the public sector,
- (4) protection granted by the state to domestic industries against foreign competition is systematically reduced. This implies that the discrimination between domestic and foreign enterprises by the state is gradually narrowed down. For example, if the state has imposed restrictions on cheaper imports and better quality importes as well, to enable sale of domestic goods then such restrictions are reduced.

8.3 Process of Liberalization in India

Liberalization in India was implemented as a gradual process. Initially investment rules were simplified for domestic producers and investors and subsequently for foreign investors. Likewise, initially the consumer goods sector was opened up for investment by foreign companies and then service sector and later on the financial sector. Thus, it was a strategic liberalization process.

The process of bringing about such economic changes which is also called economic reforms calls for systematic changes in policy regulations. Some important regulatory changes which were brought about by the Indian legislative body were,

8.3.1 MRTP Act was replaced by Competition Act. (Monopolies and Restrictive Trade Practices Act, 1969 : Act preventing enterprises from growing very big and establishing monopolies. Competition Act, 2002 : This Act replaced MRTP and was aimed at reducing unhealthy competition among enterprises).

8.3.2 FERA was replaced by FEMA. The word regulatory was removed from FERA and replaced by the word Management. (Foreign Exchange Regulation Act, 1973 : The Act regulating foreign exchange earnings and transactions of enterprises. Foreign Exchange Management Act, 1999 : The Act managing foreign exchange earnings and transactions of enterprises instead of regulating those).

8.3.3 Major changes were made in the industrial policy of which one noteworthy was, opening up for private sector the areas reserved for investment only by the public sector (now only three sectors are reserved for the public sector namely, atomic energy, some minerals related to atomic energy and railways); another noteworthy change was raising the investment limit in the definition of small scale units so that with higher investment a small scale unit can adopt modernization.

8.3.4 The procedure for foreign investment became more investor friendly and in many sectors 'automatic licensing route' was introduced for investment by foreign companies in India.

8.3.5 Besides relaxations in the industrial policy, relaxation in export-import rules were announced. Foreign exchange was allowed to be converted at market rates instead of the earlier method of convertibility only at the official rates and expenditure on subsidies was attempted to be reduced as part of the fiscal policy changes.

8.4 Privatization

Privatization means process of introducing private ownership in publicly owned enterprises and increasing the size of private sector.

In India, the public sector enterprises are owned and managed by the state (Government). Privatization means process of transferring ownership of economic enterprises from public sector to private sector either partially or fully.

8.5 Process of Privatization

Privatization can take place in the following ways :

- (1) through disinvestment (2) by reducing the number of areas reserved for investment only by the public sector and opening them for investment by the private sector (3) by establishing public – private partnership businesses.

8.5.1 Meaning and Process of Disinvestment in India :

Meaning : Disinvestment means a process where the state reduces its share of investment in a public enterprise or draws back its investment completely by selling its shares to the private sector. Thus the process by which the state 'disinvests' from public enterprises is called disinvestment.

8.5.2 Process : The following two aspects are important to understand the process of disinvestment.

(A) Sell all the shares of the state in a public enterprise to the private sector which is called complete disinvestment.

(B) Sell some shares of the state in public enterprises to the private sector for example, 29% or 49% which is called partial disinvestment. If less than 51% shares are transferred to private sector then it is called minor disinvestment and if more than 51% shares are transferred to private sector then it is called major disinvestment.

Besides owning public enterprises, the state also held control over certain areas of investment. Certain areas of strategic importance and public utility services were not open for investment by the private sector. However after privatization in 1991, most of these areas were declared open for investment by the private sector.

E.g. Banking, Education, Communication, Transportation are now open for private and foreign investment.

8.5.3 Now only the areas of atomic energy, certain minerals related to atomic energy and railways are reserved for investment by public sector.

8.5.4 After independence there was a significant rise in the number of public sector enterprises under the central government. After 1991 they didn't rise significantly. On March 31, 1951 there were 5 public sector enterprises under central government, which became 233 in 1990 and 217 in 2010 and were around 300 in 2015. The process of disinvestment from old enterprises continues while the state may also set up new enterprises.

8.6 Globalization

Globalization is the process of increasing a country's economic integration with the rest of the world by increasing trade in goods and services, increasing movement of physical and financial capital, increasing exchange of technology and increasing investments between borders. It can be undertaken by gradually decreasing the policy controls which served as impediments to foreign trade.

8.7 Process of Globalization in India

In 1991, International Monetary Fund (IMF) declared several nations as highly indebted to it and thus imposed upon them to globalize and upgrade the technologies and growth of their nations. This was a precondition before sanctioning further loans to these nations. India was one of those and accordingly India had to relax its policies of granting protection to domestic industries from foreign competition. And, thus India began globalizing by allowing more trade with other nations. The following marked a systematic globalization process,

8.7.1 Import – Export licensing policy was made simpler and easy.

8.7.2 India became member of World Trade Organization in 1995 which means abiding by its rules of freer world trade.

8.7.3 Introducing convertibility of Indian rupee into other currencies at market rate by gradually reducing conversion at the official rate. Thus, value of our currency is determined by trade.

8.7.4 There was sector wise and systematic increase in foreign direct investment in India.

8.7.5 Investors and producers in India were allowed to increase financial collaborations with their foreign counterparts.

8.7.6 State become more indifferent in policy matters between domestic and foreign investors and producers; that is, undue protection for Indian investors against foreign competition was lifted.

8.7.7 Social and cultural ties with other nations were also encouraged including relaxations by many nations in granting visas.

8.8 Foreign Investment in India

Foreign investment became an important component of the process of globalization. Under a relatively closed and controlled economy, excessive foreign exchange needs of Indian economy for purpose of investment, imports of essential goods and services, technology imports etc. were met by borrowings from

international organizations and foreign governments. As there were several controls on foreign investments, we had to buy more goods and technology from abroad for which we needed foreign exchange. After 1991, India allowed direct investment in certain areas in increased proportion. Such investment would decrease our dependence on foreign borrowings as investment by efficient foreign companies will create employment, produce variety of goods, raise tax incomes and bring technology.

8.9 Types of Foreign Investment

Foreign capital comes in two ways. (1) Foreign Institutional Investment (2) Foreign Direct Investment

8.9.1 Foreign Institutional Investment (FII) : Some foreign companies do not invest in plant and machinery in another country say, India. They invest funds in financial institutions and bond / stock / share markets in another country. They buy such stocks from the bond / share market in that country. Such investment is called Foreign Institutional Investment / Portfolio investment and such companies have to register in India as Foreign Institutional Investors. In India, they can invest only up to a limit specified by rules. They have no direct stake in the management of the home company. Hence financial capital comes to the home country through the stock market.

This type of investment comes to the home country in a very short span of time when foreign companies buy shares of home country in large amounts and it can also leave the home country in an equally short span of time when foreign companies sell the home country's shares in bulk. Hence funds take a flight in and out of the country easily and thus this is considered to be a risky and unstable kind of foreign capital.

8.9.2 Foreign Direct Investment (FDI) : When the home country invites capital by allowing foreign investors / companies to produce and sell directly in India such investment is called foreign direct investment.

In FDI, foreign companies directly set up their business in India by constructing their plants, bringing in technology and producing; or by collaborating with Indian companies to do so. These companies either manage the entire business or have a say in management if they are collaborating partners.

8.10 Nature of Foreign Direct Investment

The nature of FDI can be stated as under :

- (1) It is a physical establishment in the form of direct investment and hence stable form of investment.
- (2) It brings machines, materials and wealth to the home country.
- (3) It brings new technology to the country.
- (4) It brings a different work culture along with it.

India has systematically allowed FDI in increased proportion in various sectors and India's foreign exchange earnings have increased.

8.11 India's Foreign Trade Policy

This policy regulates India's trade with other countries.

The foreign trade policy of India always faced the following challenges :

8.11.1 Need to control certain imports in order to protect domestic production from competition by foreign goods

8.11.2 Ensure enough imports of technology, machines, spare parts as well as resources to help increase domestic production and import substitution.

8.11.3 Control imports of goods unessential for India's development in order to save scarce foreign exchange.

8.11.4 Encourage exports to earn foreign exchange in order to pay for necessary imports.

8.11.5 Many Indian goods could not compete against the quality of foreign goods and hence increasing exports was a challenge for trade policy.

8.11.6 Promote export of goods produced by small scale sector.

8.11.7 The challenges of foreign trade are different from those of domestic trade as foreign trade involves foreign exchange.

The foreign trade policy of India was formulated and amended from time to time to deal with the above challenges in the best possible manner.

8.12 Stages of India's Foreign Trade

Let us understand India's foreign trade policy in two sections.

(1) foreign trade policy before globalization and (2) foreign trade policy after globalization

8.12.1 India's Foreign Trade Policy before Globalization (1991) : In the initial years after independence, India had to set up its administrative, economic and state functions in the interest of the nation. After experiencing long period of foreign rule which was established after East India Company came to India for trade, India was not ready for many imported goods. At the same time, because of poverty and scarcity of foreign exchange, India was compelled to regulate imports. Exports were also limited.

India adopted a mixed economic system after independence and steered strategic development through planning. India started setting up basic industries of large scale and in order to establish such huge industries we had to import costly machinery, technology and spare parts. Thus, scarcity of foreign exchange emerged and restrictions were imposed on imports of consumer goods.

Hence, in the foreign trade policy in the initial years emphasis was laid upon measures of protection for the domestic industry against foreign competition, various import restrictions were imposed and export promotion measures were introduced. Later on, along with the traditional items of exports like agricultural produce, handicrafts, gems and jewellery, the exports of non traditional industrial goods were also promoted.

Rates of exchange were officially determined and the rupee was devalued in order to increase exports and reduce imports. With devaluation, imports did become costly but since the items of imports were necessary for India's industrialization there was no significant decline in imports. Import bills increased and there was a deficit in India's Balance of Payments. A policy of import substitution was also adopted. Import substitution is a policy of substituting imports by domestically produced goods. That is, imports are reduced and replaced by domestic goods.

8.12.2 India's Foreign Trade Policy after Globalization (1991) : After 1991 economic policies in India were reformed to enhance trade and investments. Foreign trade policy was made outward looking from a restrictive inward looking one. Indian rupee was allowed to be converted into foreign currencies at market rates from the earlier official conversion, import – export licensing was made easy; now strict licensing exists only for Crude, edible oils and chemical fertilizers.

With promotion of FDI and privatization, foreign companies can now sell variety of goods in India. After globalization India's trade with non-traditional trade partners or new countries increased and new trade policy aimed at increasing India's percentage share in world trade. India became a member of World Trade Organization (WTO) in 1995 and trade policy changes were made according to WTO rules; For example, changes were made in import-export rules for agricultural goods, trade related investment measures and so on.

8.13 Evaluation of Economic Reforms

From 1951, India adopted socialist pattern of planning and in order to set up a society with equality, it adopted narrow, regulated and inward looking economic policies. After 1991, India made these policies liberal, market-oriented and outward looking for promoting trade and development.

This transformation was called the process of economic reforms. Evaluation of these reforms after almost 25 years can be done as under :

8.13.1 Favourable Effects of Economic Reforms : Economic policy reforms in the form of liberalization, privatization and globalization increased the significance of the market forces of demand and supply owing to which determination of prices, wages and interest became market oriented and more realistic and less regulated. Besides, owing to reduced regulations, the decisions regarding production, investment and distribution also became market oriented. The stern difference between domestic and foreign investments narrowed down. And, certain effects favourable to India can be observed.

(1) Consumers started getting variety of goods of international quality easily and at reasonable prices.

(2) India's foreign exchange reserves increased.

(3) India's exports increased.

(4) Along with increase in FDI, the risk of certain investments and debt burden of the state for importing costly technology etc. reduced.

(5) Large scale investments increased in the private sector which in turn increased production and employment.

(6) Factors of production became more mobile within the nation and between nations.

(7) Under an era of too many regulations, corruption, bureaucratic hurdles, delays in decision making and inflexibility in administration had become a common feature in policy implementation. All these are found to have gradually reduced after reforms.

(8) Certain sectors which are significant in growth but neglected owing to scarcity of capital and government regulations got an impetus with private sector's investment initiatives. For example, natural gas pipelines, modernization of railways and so on.

(9) Shortages of goods and services became a thing of past; rather variety increased.

(10) Social and cultural ties with other nations improved.

8.13.2 Unfavourable Effects of Economic Reforms : The new economic policies also raised some social concerns in India like,

(1) Small and cottage industries could not withstand competition from multinational companies.

(2) Globalization started along with privatization. Before the Indian private sector became efficient, Indian companies started facing competition from foreign companies and some Indian companies suffered a setback.

(3) Subsidies were reduced in many sectors and the services of these sectors became expensive.

(4) Exchange rate determination (determining value of Indian currency vis-a-vis foreign currencies) was left to the market and hence fluctuated more. Many companies suffered owing to such fluctuations.

(5) Some foreign companies started selling their goods at unduly low prices in India. As a result many Indian companies selling similar goods received a setback as they cannot produce and sell at such low prices. Such a method of foreign companies is called 'dumping'.

(6) Many policies of World Trade Organization imposed strict quality measures and posed difficulties for exports of countries like India. Especially for exports of agricultural goods.

(7) To cope with the speed of privatization and globalization, the infrastructural facilities like electricity, roads etc. proved insufficient.

(8) Inequalities of economic power increased.

(9) The production and sale of life style goods increased against necessities.

(10) Some people believe that the social-cultural foundations of India are threatened because of globalization.

Exercise

1. Choose correct option for the following from the options provided :

- (1) From which year the economic reforms of LPG were introduced in India ?
(A) 1947 (B) 1951 (C) 1991 (D) 1980
- (2) From which year was FEMA introduced in India ?
(A) 1973 (B) 1980 (C) 1991 (D) 1999
- (3) In the recent times which of the following area is reserved for exclusive investment by the public sector ?
(A) Fertilizer (B) Television (C) Automobile (D) Railway
- (4) What is the policy of producing the goods domestically which are similar to imports called ?
(A) Privatization (B) Liberalization (C) Import substitution (D) Globalization
- (5) What is the investment made by foreign companies in our country called?
(A) FERA (B) FEMA (C) FDI (D) NRI

2. Answer the following questions in one sentence :

- (1) Give the full form of FERA.
- (2) Give the full form of FEMA.
- (3) Give the full form of FDI.
- (4) Give the meaning of liberalization.
- (5) Give the meaning of globalization.
- (6) Give the full form of FII.

3. Answer the following questions in short :

- (1) Give the meaning of and components of economic reforms.
- (2) Give the full form of MRTP and state the reasons behind the formulation of this act.
- (3) Give the meaning and types of disinvestment.
- (4) Explain the reasons which compelled India to adopt reforms in 1991.
- (5) Give a short explanation about Foreign Institutional Investment.

4. Answer the following questions in brief points :

- (1) Give the meaning and important aspects of the process of globalization.
- (2) Give the meaning and nature of Foreign Direct Investment.
- (3) State the challenges before the foreign trade policy of India.
- (4) Explain the foreign trade policy after globalization.
- (5) State the adverse effects of economic reforms.

5. Answer the following questions in detail :

- (1) Give the meaning of liberalization and explain the changes which came about with it in India.
- (2) Evaluate the effects of the economic reform process of India which began in 1991.
- (3) Give the meaning of privatization and explain its process in India.

Glossary

Economic Reforms	:	It is a process of systematically reducing policy regulations and excessive state imposed controls in economic functioning (e.g. decisions related to investment, production, trade etc.) in India.
Liberalization	:	It is the process which increases the scope of private enterprises, private sector's say in economic functioning, market oriented decision making by relaxing the policy regulations regarding the same.
Privatization	:	Privatization means process of transferring ownership of economic enterprises from public sector to private sector either partially or fully.
Globalization	:	Globalization is the process of increasing a country's economic integration with rest of the world.
Disinvestment	:	Disinvestment means a process where the state reduces its share of investment in a public enterprise or draws back its investment completely by selling its shares to the private sector. Thus the process by which the state 'disinvests' from public enterprises is called disinvestment.
MRTP – Monopolies and Restrictive Trade Practices Act, 1969	:	Act preventing enterprises from growing very big and establishing monopolies.
Competition Act, 2002	:	This Act replaced MRTP and was aimed at reducing unhealthy competition among enterprises.
FERA – Foreign Exchange Regulation Act, 1973	:	The Act regulating foreign exchange earnings and transactions of enterprises.
FEMA - Foreign Exchange Management Act, 1999	:	The Act managing foreign exchange earnings and transactions of enterprises instead of regulating those.



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Introduction

National Income is a basic concept of macro economics. In the concept of national income an attempt is made to measure economic activity of the whole economy. The national income of a country is a balancesheet of the performance of its economy. National Income familiarises us with the economic health of the Economy. If the national income of an economy increase it is generally a symbol of well being and if the national income of an economy is low and increases slowly it can be said that it is a symbol of unhealthiness of an economy. In short, national income is used as a criterion of the economical prosperity of a country. Generally, the market value of final products and services produced by using national wealth with capital and labour during a year in a country is called national income. There are important concepts like-GNP, NNP, GDP and NDP of national income. These are also used to compare two countries economy. However, what actually is the national income ? How is it created ? How can it be measured ? Which are various methods of its measurement ? Certain problems arise while measuring the national income. Whether the monetary income should be found out or the real income should be found out ? Let us familiar with all these concepts.

9.1 Meaning of National Income

9.1.1 General Meaning : The monetary value of the total production in agriculture, industries and service sector in a country during a year is the national income of that country. When we say that the national income of India is ₹ 128 lakh crores, it means that the goods and services of ₹ 128 lakh crores have been produced during one year in agriculture, industries and service sector.

9.1.2 Alfred Marshall (Production Based Definition) : The net production of physical (tangible) and non physical (service) things by

using natural wealth (land) with capital and labour in a country during the year is the national income of the country. Prof. Marshall lays stress on net production of goods and services in the definition and therefore this definition is production oriented.

9.1.3 Irving Fisher (Consumption Based Definition) : The proportion of direct consumption of goods and services by the people of a country during a year is called the national income. Fisher has laid stress on consumption of physical and non-physical goods and services in this definition, therefore definition is consumption oriented.

9.1.4 A.C. Pigou (Money Based Definition) : National income is a flow of those things (goods) and services whose payments have been done through money or which can be easily presented by money. In other words, the total income of society along with foreign income which can be easily measured with the help of money is the national income. In this definition, Pigou lays stress on money, therefore this definition is money oriented.

Inferences based on various definition :

- (1) National income is a measurement of income obtained in a definite period of one year.
- (2) In national income, the final products and services are considered.
- (3) National income is a monetary value of final products and services.
- (4) National income is calculated after deducting depreciation.
- (5) Goods and services should be produced or consumed.

9.2 National Income and National Product

Generally national income and national product are considered one and similar. However, they actually are different.

9.2.1 National Income : The sum of total income obtained from the contribution of four factors of production in national production is the national income. $\text{National income} = \text{Rent} + \text{Wages} + \text{Interest} + \text{Profit}$.

9.2.2 National Product : The sum of total production value of final products and services obtained by various factors of production in various sector. (Agriculture, Industries, Services) in a year is the national product. National product is goods and services produced by various firm in a country during a year. In short, $\text{National Product} = \text{Total Production of Agriculture} + \text{Industries} + \text{Services sector}$.

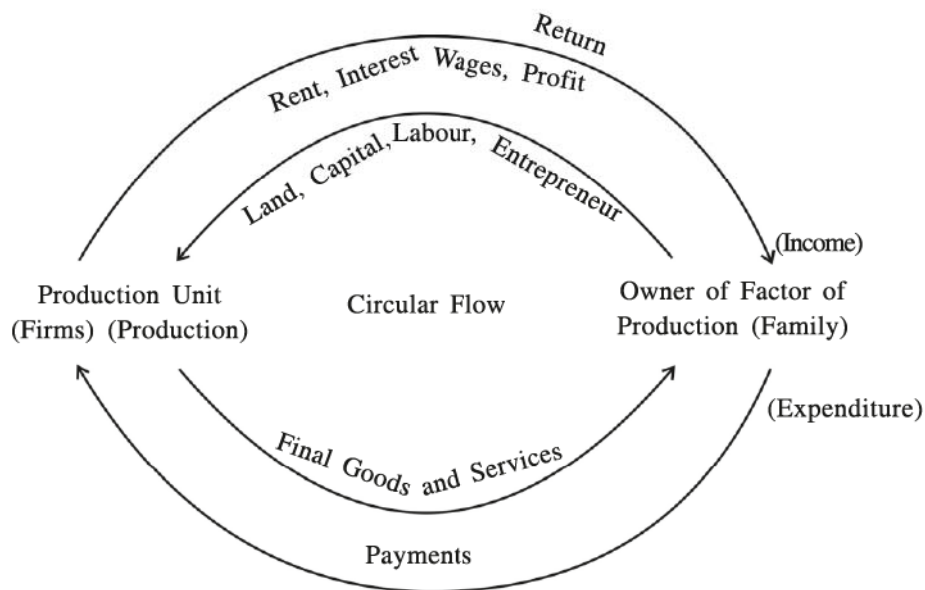
If a state does not have intervention (no taxes etc.) and no foreign trade (no import-export), the national income and national product remain similar. Due to taxes national product is higher than national income because price is higher than production expenditure due to taxes. Besides, due to subsidies given by the government, the national product is lower than national income.

9.3 Circular Flow of National Income

In terms of theoretical explanation, there are two types of economy : (1) Closed economy and (2) Open economy. The closed economy is the one in which there is no role of foreign trade. Such economy has no economic transactions with other countries. No goods, services and factors of production are exported and no goods, services and factor of production are imported in such country. Closed economy is self-dependent or self reliant whereas in the open economy the foreign trade play an important role. Some works are done by government and economy has import-export relations with other countries. Here, we will discuss circular flow of national income only in terms of closed economy.

To understand the circular flow of production-income-expenditure, we will divide economy into two major sectors (fields). The business firms and owner of factors of production, purchase necessary factors of production, capital and labour from families production process and uses them for production.

Thus, the factors of production reach to firms through families for using the factors firm pays rent, interest, wages and profit (Income) to the owner of factor of production or the families. Thus the flow of money firstly goes to families from the firms.



9.1 Circular Flow of National Income in a Closed Economy

A firm produces goods and services with the help of these factors and puts them in market for selling them. The families purchase goods and services from market. Thus the flow of goods and services comes to families from firms. Families pay money to firms for purchasing goods and services (Expenditure) and therefore the flow of money comes back to firms from families and a firm purchases factor with the help of this money and starts the production again and again pays to families and from families to firms is called circular flow of production-income-expenditure of the national income. This circular flow of national income keeps the economy constantly vibrant. National income can be measured by three ways : (1) Production (2) Income (3) Expenditure.

The flow from families to firm and from firms to families whereas the goods flow from firm to families and payment flow from families to firms. However it must be remembered that it is a closed economy.

In fact there is open economy in which the government has a role to play. Economy shows savings and it has the existence of import and export. The circular flow can be explained on the basis of market in such economy, too.

9.4 Important Concepts of National Income

9.4.1 Gross Domestic Product - GDP : There are many concepts of national income among which the concept of gross domestic product is an important concept. The market value of goods and services produced by citizens of a country and foreign citizen within a country's limit is called gross domestic product.

Important Facts :

(1) In gross domestic product, the final products or goods produced within the country's limit/ boundary by natives and foreign citizens or by nature (Crude Oil) are considered.

(2) The concept of gross domestic product is related to the boundary of a country in which the production by citizens of a country in a foreign country or the incomes generated by citizens of a country from foreign countries are not considered.

(3) For economical comparison of countries and to show the progress of an economy the diagrams of GDP are used in practise.

9.4.2 Net Domestic Product (NDP) : During the process of production, depreciation occurs due to use of capital and factor of production like machines, buildings, equipment etc. After sometimes, these factors of production become useless and they need to be replaced. Sometimes capital factors are changed with change in technology. Thus, during the process of production when the depreciation of factor is deducted from gross domestic product, we get net domestic product which is called NDP in short.

After deducting depreciation of factor of production from the domestic or foreign factor during a year is called net domestic product in short, $GDP - \text{Depreciation} = NDP$.

9.4.3 Gross National Product (GNP) : The production done by citizens of a country and foreign citizens within the boundaries of the country is the gross domestic product, while the sum of the value of the citizens of the country produce in a year is GNP. Whereas, the production done by citizens of a country within the country on in foreign country is not important here, but the production should be done by the citizen of our country. The monetary value of goods and services produced by citizens of the country in a year is called the Gross National Product (GNP) of the country.

Important Facts :

(1) In GNP, the value of production of current year is considered. The production value of previous year is not considered.

(2) In GDP, the income of citizens living in foreign countries is added and the income of foreign citizens living in the country is deducted.

$GNP = GDP + \text{Net income obtained from foreign countries. (total income from foreign countries} - \text{total payment to foreign countries)}$.

(3) Mostly the diagrams of GNP are used in practice.

9.4.4 Net National Product (NNP) : During the process of production, the depreciation of factors of production, machines, building and equipment occur and their values decrease which is called capital depreciation. To find out the net national product the amount of depreciation is deducted from gross national product and the remaining is called the net national product.

After deduct depreciation from the monetary value of goods and services produced by citizens of country is called net national product.

Important Facts :

(1) The value of production of current year after deducting depreciation from the GNP is NNP.

(2) $GNP - \text{Depreciation} = NNP$

9.4.5 Per Capita Income : National Income is a criterion of economic growth, similarly the per capita income is a criterion of national development. Generally we get per capita income of a year by dividing the total national income of country by the population of that country. Per capita income is the average income per an individual. The per capita income can be presented by the following formula :

$$\text{Per capita Income} = \frac{\text{Gross National Income}}{\text{Total Population}}$$

Suppose the national Income of a country is ₹ 60,000 crores in a year and the population of that country in that year is 2 crores then the per capita income is,

$$\begin{aligned}\text{Per capita Income} &= ₹ \frac{60,000 \text{ crores}}{2 \text{ crores}} \\ &= ₹ 30,000\end{aligned}$$

It means that the citizen of a country obtain the average income of ₹ 30,000 during a year. If the per capita income is calculated with the measurement of national income at the price of current year, it is called current price per capita income and if it is calculated by national income at the price of the base year (fixed price) it is called Fixed Price Per capita Income. It can be said that the higher the per capita income, the higher is the proportion of goods and services obtained by citizens. In another words, standard of living of the citizens is higher.

Important Facts :

- (1) Per capita income decreases if the growth rate of population is higher than the growth rate of national income
- (2) The per capita income is an average measurement.
- (3) Per capita income does not change with change in the distribution of national income.
- (4) Per capita income is not a true criterion in the inequality of income in a country increases.
- (5) The true criterion of country's progress is not the national income but the per capita income.
- (6) UNO also uses diagrams of per capita income along with the diagrams of national income while comparing the progress of two countries.
- (7) The comparison of two countries can be done by their per capita income.
- (8) Per capita income enables the assumption of standard of living of country's citizens.

9.5 Measurement of National Income

The measurement of national income means calculation done on the basis of various concepts of national income. There are three concepts of national income and there are three methods to calculate national income on the basis of these three concepts.

- (1) Production Method (2) Income Method (3) Expenditure Method.

9.5.1 Production Method : This method of calculating national income has been developed from the definition given by prof. Marshall. The sum of monetary value of finished goods or services produced in agriculture, industries and service sector. The sum of monetary value of goods and services is the national income. Find out production in agriculture, industry and service sector then it is multiplied by market value and find out money value. This money value is a national income.

Important Facts : National Income is calculated by keeping in mind the following things.

- (1) **Classification of Economy in Different Sectors :** The economy is classified into various sector like agriculture, industries, services, mines, construction, manufacturing, trade-commerce, transportation, communication, banking, education etc.
- (2) **Selection of Goods or Services :** Value of produced goods in various parts of economy. only finished goods, intermediate goods or services are not being calculated.
- (3) **Service of House-Wife :** The service of the household work of a house wife is not sold in market and therefore its monetary value can not be measured. Thus it is not considered as national income.

(4) **Self-Consumption** : Goods produced for self-consumption are not sold in market so its monetary value can not be measured and therefore it is not considered as a national income. As an exception the food-grain for self-consumption of farmers in India is considered as national income.

(5) **Defence (Police)** : There are no markets of defence and police services. However, they are not considered in calculation of national income.

(6) **Imputed Rent** : When a house is given to some one on rent, the probable rent obtained is called imputed rent (here we assume if house given to some one on rent) and its value is considered in national income.

(7) **Double Counting** : Double counting should be removed from national income accounting. When the value of one commodity is calculated for more than one time in national income it brings up over valued the national income. While calculating national product in terms of production the double counting should be avoided For example, in national income, the monetary values of both iron and the machines made out of iron during a year are counted it is called double counting, because the value of iron is included in the value of machines. Thus if we calculate the value of iron and the machines then value of iron being calculated for two times. There is two remedies to avoid double counting.

(A) **To Count the Value of Finished Goods Only** : In this method, instead of counting the value of goods having half-made interim use, if the monetary value of the machine which is the finished goods and the value of iron involved in it is considered, the problem of double counting can be solved.

(B) **Value Added Method** : In production process, when a production of goods goes from one stage to another stage, its monetary value increases. If this increased value is drawn out and added in national product, the double counting does not occur. Let us see the following example.

Stages of Production	Sales Income (₹)	Factor Cost (₹)	Increasing Value (₹)
Cotton	100	00	100
Yarn	200	100	100
Cloth	280	200	80
Total	580	300	280

If in a factory, cotton of ₹ 100 is brought and yarn of ₹ 200 is made out of it and cloth of ₹ 280 is made out of the year, the monetary value of ₹ 100 + ₹ 200 + ₹ 280 = ₹ 580 is counted in national product which is considered as double counting. The cotton is included in both, yarn and cloth, and therefore the value of cotton is considered and counted for 3 times. This is double counting, but if the value of cotton of ₹ 100 + yarn of ₹ 100 + cloth of ₹ 80 is counted or value addition of = 280 is considered the double counting does not occur. The above stated example shows that factor cost is zero because here it is assumed that the production of cotton is of the previous year which has been considered in the national product of the previous year.

(8) **Indirect Tax and Subsidy** : Due to inclusion of Indirect taxes in the market value of goods, the indirect taxes are deducted to find out national product and the subsidy given by government is added.

(9) **Resale** : When a good was produced in the past its value was counted in the national product. When it is resold its value is not counted, but if it is counted, it will be the double counting. If a house purchased in year 2000 and it is resold today this resale is not considered in national products.

(10) **To Deduct Depreciation** : During the process of production the depreciation related to capital factor is deducted from the national product.

(11) Export value is added.

(12) The value of smuggled or illegal goods is not considered in calculation.

9.5.2 Income Method : This method of measuring national income has been developed from the definition given by prof. Pigou. When the income obtained by citizens of country and the state is added the national income can be found out in the method of income. For measuring national income, the rent, interest, wage and profitable income obtained from the four factors of production land, capital, labour, entrepreneur are summed up in this addition, the income obtained from foreign countries is added and the payments done by way of rent interest wage, profit for foreign factor used in the country is deducted.

Important Factor : The following things are considered while counting national income in terms of income method.

(1) **To Count the Income of Factor** : The following are the types of income obtained by the factor of production.

(A) **Income of Rent** : The rent of land/building is considered as income. Those who live in their own house may get the income of rent which is called imputed rent. The income obtained by way of rights like the copy right of a book or patent is also considered as the income.

(B) **Income of Interest** : The interest obtained by people on their capital during a year is considered but the interest obtained from the government is not considered because a state generates income through taxes and pays it as interest, which means that the money is transferred only.

(C) **Income of Wage** : The wage or salary given to labourers for their work during a year is considered as an income.

(D) **Income of Profit** : The income obtained in the form of profit or dividend by investor/share holders is also considered as an income. It includes reserved profit and taxes payed on it.

(2) **Income which are not Considered** : In the method of income for calculating national income. The income generated by way of gift, reward, prize, tip, theft, unemployment allowance, government assistance to elders, lottery, etc are not considered in the national income.

(3) The subsidy given by the government is deducted.

(4) Net Foreign Income is added (Export-Import).

(5) Income generated as commission or brokerage on sale of consummable goods.

(6) Those incomes which show flow of production of goods or services in economy which increase the monetary value of goods in economy are considered.

(7) The income of the second hand goods is not considered for e. g. the income obtained by selling old mobile phones is not considered.

9.5.3 Expenditure Method : This method has been developed from the definition given by Prof. Fisher. The national income is measured by summing up the total monetary expenditure incurred on goods and services by individuals, families, firms and government during a year. This method shows the assumption of income = expenditure. In this method of expenditure the expenditure incurred in purchasing finished goods or services during a financial year is included. Total expenditure during a financial year is equal to the GDP.

Important Fact : The following things are considered while counting National Income in terms of Expenditure method.

(1) Four Factors of Monetary Expenditure :

(A) Consumption Expenditure : It is the expenditure incurred on consumable goods by citizens, families and firms. It includes expenditure on durable goods like TV, scooter car etc. Perishable goods like food grains, fruits, vegetables, services like education, medical treatment, transportation and communication.

(B) Investment Expenditure : It is the expenditure incurred on building of a factory, plant machinery and necessary goods equipments for the profession.

(C) Government Expenditure : It includes expenditure such as consumption expenditure, investment expenditure, administrative expenditure etc. by central government, state government and local bodies.

(D) Net Export Expenditure : The Expenditure on import of foreign goods by citizens of country is the expenditure of the country and our export is expenditure incurred on goods by foreign citizens. Therefore, the difference between these two is the net export which is included in the national income. In short. **Total National Income = Consumption Expenditure + Investment Expenditure + Government Expenditure + Net Export Expenditure.**

(2) Expenditure not Considered in National Income : In terms of expenditure certain expenditure are not considered in calculating the national income which include expenditure on the purchase of second-hand goods, transfer expenditure (Transfer payment), pension, unemployment allowances, financial assistance to widows etc. The expenditure on purchase of old shares, expenditure on use of goods of interim use are not considered in national income. Some expenditure are incurred without the production of goods services, which involves only the transfer of money expenditure, like subsidies are not considered in national income.

(3) Difficulty in Calculating National Income : The official data of people expenditure can not be obtained and therefore it becomes difficult to calculate national income by this method. For example, a business person named Arav gives ₹ 30,000 as salary to Milap, the accountant and considers ₹ 30,000 as the expenditure incurred. Now Milap gives ₹ 3000 to Khushbu who is his domestic helper. This becomes Milap's expenditure. Hence the question arises, 'what is the actual expenditure ?' ₹ 30,000 or ₹ 30,000 + ₹ 3000 = ₹ 33,000 ? Thus, the problem of double counting arises even in the expenditure method of calculating national income.

For calculating national income, a country can adopt any method from the above stated methods. If the obtained data are true what ever be the method of calculation of national income, the measurement of national income will be the same. However, every method has one or two other limitation and therefore it is said that these methods are mutually complementary to each other. For example, national income is calculated in form of production its truthfulness can be tested in terms of expenditure for developing country like India the method of production is suitable where as for countries like America and Russia, the method of income and expenditure are suitable.

9.6 Problems in Measuring National Income

Since 1954, the Central Statistical Organization (CSO) calculates the national income. Currently,

national income at constant price is calculated considering 1999-2000 as the base year. Certain problems arise while measuring national income which are as follows :

- (1) Problems of Double Accounting
- (2) Problems of Self-Consumption
- (3) Problems of Depreciation
- (4) Tax Avoidance and Tax Evasions.
- (5) Illegal income
- (6) Problems of Net Foreign Income
- (7) Problems in Accounting : In measuring the national income the following problems arise in accounting of production, income, expenditure.
 - (A) Illiteracy
 - (B) Small scale production-sale
 - (C) Barter System
 - (D) People involved in more than one occupation

In spite of the above stated problems the CSO tries to obtain true national income by counting the income carefully.

9.7 Monetary Income and Real Income

National Income is measured by the criterion of money but if the criterion of money is unstable or in other words, if there is fluctuation in price. (Price increase-decrease) the national income increases in spite of stable production and fluctuation in national income or fluctuation in production. Here the question arises that when national income increases with increase in production, the criterion can be considered true. To understand it, The monetary national income and Real national income must be understood.

9.7.1 Monetary National Income : If national income is measured at current price, it is called monetary national income. The national income obtained by multiplying the production of all goods with the market price of respective goods is called monetary national income. But this monetary national income is not real income. If production in current year is equal to the production in the previous year but the prices have doubled in the current year, the national income of current year will be double than that of the previous year ($\text{Production} \times \text{Price}$) which does not show true situation, because the production is the same as that in the previous year, only the prices have doubled. There has been no improvement in standard of living of people, so the true real national income is the only way to know true national income.

9.7.2 Real National Income : If national Income is measured at base-year price or fixed price it is called real national income. The national income obtained by multiplying the production of all goods with the fixed price of respective goods during the year is called the real national income. Real national income shows the true situation of a country. In fact, production and market price (current price) both increase and therefore some increase in national income occurs due to increase in production and some increase occurs due to increase in price. But we are interested in the rise in national income, which occurs due to increase in production, because if national income increases due to increase in production the consumption and standard of living of people can be higher.

Exercise

1. Choose correct option for the following from the options provided :

- (1) Who gave the definition of national income by production method ?
(A) Marshall (B) Fisher (C) Pigou (D) Samuelson
- (2) Which among the following can be considered in GNP ?
(A) Operation in hospital (B) Household work of housewife
(C) A teacher teaching his/her own child (C) Sing a song in the bathroom
- (3) Which among the following is not included in closed economy ?
(A) Families (B) Firms (C) Industries (D) Foreign Trade
- (4) Which expenditure of government are not considered in national income ?
(A) Production (B) Transfer Payment (C) Wages of laboureres(D) Defence expenditure
- (5) How many factors constitute monetary expenditure ?
(A) 4 (B) 2 (C) 1 (D) 10
- (6) Which one of the following is not a method to measure national income ?
(A) Production method (B) Income method (C) Sales method (D) Expenditure method
- (7) What should be deducted from GDP to get NDP ?
(A) Depreciation (B) Net factor income from abroad
(C) Indirect tax (D) Subcidy

2. Answer the following questions in one sentence :

- (1) What is national income ?
- (2) What is called closed economy ?
- (3) Give formula of Per Capita Income.
- (4) Give the meaning of Net Domestic Product.
- (5) What are transfer payments ?
- (6) Whether the purchase of old building can be considered in national income or not ? Why ?
- (7) Why the service of a house wife is not included in National Income ?
- (8) What is imputed rent ?
- (9) Name the institution which measures national income in India.
- (10) At which price monetary national income is measured ?
- (11) 'Per capita income is not the income of every citizen of the country.' How ?

3. Answer the following questions in short :

- (1) Give definition of national income as given by Marshall or Fisher.
- (2) According to Prof. Pigou, what is called national income ?
- (3) Which expenditures are not included in the expenditure method of National Income ?
- (4) Show the Difference between :
(a) GDP and NDP (b) GNP and NNP
(c) GDP and GNP (d) Closed economy and open economy

4. Answer the following questions in brief points :

- (1) Explain in brief the problems arising in measuring National Income.
- (2) Explain the concept of monetary income and real income.
- (3) Give the meaning of Per Capita Income and show its importance.
- (4) Write short notes on :
 - (a) Gross Domestic Product
 - (b) Net Domestic Product
 - (c) Gross National Product
 - (d) Net National Product

5. Answer the following questions in detail :

- (1) Explain with diagram the circular flow of national income in a closed economy.
- (2) Explain the output method for measuring national income.
- (3) Define double counting and discuss remedies to remove double counting.
- (4) Explain the income method for measuring national income.
- (5) Describe the expenditure method for measuring national income.

Glossary

Production	:	The goods produced in a stipulated time with available factor is called Production.
National Income	:	The summation of total income (rent, wage, interest, profit) of four factors of production which they earn by production.
National Product	:	The summation of total production value of finished goods and services produced during a year is called National Product.
Closed Economy	:	It is an economy in which government and foreign trade have no role to play. Such economy has not economical transactions with other countries it is an economy without import-export.
Open Economy	:	It is an economy in which government and foreign trade have a role to play. Government performs many functions. The country conducts import and export all current economics are Open Economy.
Gross Domestic Product (GDP)	:	The market value of finished goods and services produced by citizens of a country or Foreign citizens within the boundry of the country during a year is called Gross Domestic Product.

Net Domestic Product (NDP)	: The Monetary value obtained after deducting depreciation from the market value of final goods and services produced by citizen of a country or foreign citizens with in the boundary of the country during a year is called Net Domestic Product.
Gross National Product (GNP)	: The Monetary value of goods and service produced by citizens of a country during a year is called Gross National Product.
Net National Product (NNP)	: The remaining monetary value after deducting depericiation from the monetary value of goods and services produced by citizens of country is called Net National Product.
Per Capita Income	: The average income per individual is the Percapita Income. The income obtained by dividing the total national income bye total population of a country is called Per Capita Income.
Double Counting	: When value of goods and services is calculated for more than one time while measuring national income, it is called double counting.
Imputed Rent	: The estimate of probable rent of a building (house) to be given to other is called imputed rent.
Monetary Income	: The national income which is measured at market price is called monetary national income.
Real Income	: The national income which is mearused at base-year or fixed price is called Real Income.
Depreciation	: It is a gradual and permanent reduction in price of capital factor due to consumption. The depreciation occurs to machinary and capital factor during production process.
Tax Avoidance	: When a tax payer uses loopholes of law, to avoid the paymets of tax it is called tax avoidance. Tax Avoidance is legal.
Tax Evasion	: When a tax payer does not fulfil the responsibility of paying tax it is called tax evasion. Tax evasion is illegal.



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Introduction

In India's mixed economic system, activities of the state assume unique importance. The state accepted responsibility of creating essential basic industries and infrastructure facilities necessary for India's economic development after independence and began the process of planned economic development of the country by constituting the Planning Commission (which is now reformed into NITI Ayog - National Institute for Transforming India). In an economics driven world, there are no activities which have no expenses. If one individual escapes the cost of an activity, another individual has to bear it. The state also incurs expenses for the activities it undertakes and in order to pay for these expenses, it must raise and generate incomes.

In a democracy no government can undertake activities, incur expenses or raise incomes without the approval of elected representatives in the constituted body (in India: Lok Sabha, State legislative assembly, Municipal bodies, Panchayat). Before the commencement of a new financial year, a government in India, presents before the elected body for its approval an estimated statement of expenditure and incomes and such a statement is called budget.

The Constitution of India has assigned power to a three - tier government; the tiers being: (1) the central government (2) the state governments and (3) the local governments (e.g. municipality).

All these tiers of government incur expenditure on various activities and raise incomes from various sources and hence it is important to have an idea of the budgets of all forms of government in India.

The Constitution of India thus provides a list of responsibilities and sources of revenue for these governments and this arrangement is called system of federal finance.

The subjects in list of responsibilities of Central government are those which are of utmost importance for the country and uniform in impact for all states. To mention a few of them : defence, railways, census, etc.

Subjects which have regional importance according to the physical and social environments of respective states as well as vary for different states are in the list of responsibilities of the states. Some of these are, law and order, public health, sanitation, forests etc. The concurrent list mentions areas of joint responsibility of the centre and states. These subjects are important for the country and are uniform in purpose for all states but may require variation in different states. Some of these are economic planning, electricity, education, social security and so on. The local bodies look after primary activities like sanitation, street lights etc.

All governments present their expenditure and income in the form of a budget.

10.1 Meaning of a Budget

A government budget is an annual accounting statement of the item –wise estimates of expected revenue and anticipated expenditure of the government for a new fiscal year.

Main elements of the budget are:

- (1) It is a statement of estimates of government receipts and expenditures.
- (2) Budget estimates pertain to a fixed period, generally a year.
- (3) The objective of budget of any government is economic development of the region and public welfare.
- (4) It is required to be approved (passed) by Lok Sabha or Assembly or some such public body before its implementation.
- (5) Usually a budget is declared by the Finance Minister of a country, state or the head of a governing body.

10.2 Purpose of a Budget

A government must plan its expenditures and raise its income in such a way that the following objectives are fulfilled:

10.2.1 To Obtain Approval of the Body of Elected Representatives : The ruling government requires an approval of the elected representatives of any democratic government for the expenditures and incomes estimated to be incurred in the ensuing financial year.

10.2.2 To get an Idea Regarding Available Resources and Areas Requiring Expenses : To get an idea regarding activities which the government can and should undertake, expenses to be incurred in various sectors and sources from where the necessary income may be raised.

10.2.3 Provide Direction for Allocation of Resources : To give a direction to allocation of resources (collected income) in different sectors according to priority and need. Without preparing proper estimates, some sectors will receive more funds and some others may be neglected.

10.2.4 For Knowledge of the Public : When a budget is presented, people come to know of commodities which will become cheaper owing to government's increased allocations in those sectors and commodities which will become dearer owing to increased tax burden in those sectors.

Thus, in a way budget is an important component of planning by the government and various economic policies are guided by the budget allocations in concerned sectors.

10.3 Types of Budget

A budget is of two types :

- (1) Balanced budget
- (2) Unbalanced budget :
 - (a) Deficit budget
 - (b) Surplus budget

By double entry book keeping system, all budgets are balanced as the credit (income side) and debit (expenditure side) always balance.

However, in the present reality, government budgets may be balanced or unbalanced.

10.4 Balanced Budget

This means, government plans its expenditures in such a way that those can just be met from the likely sources of revenue. This depicts an ideal situation and such a budget is impractical in real sense. In the developing countries, Governments have many developmental responsibilities and therefore they cannot plan expenditures within given revenue constraints. Even developed countries have to keep on increasing their expenditures after defence and to maintain their growth rate or develop in newer directions.

10.4.1 Merits of a Balanced Budget :

- (1) A balanced budget ensures financial stability.
- (2) In this type of budget, governments avoid wasteful expenditures to keep the expenditures equal to incomes.
- (3) Since the government keeps expenditures in control to match the income, it does not have to impose additional taxes on the people to raise extra incomes to meet undue expenditures.

10.4.2 Demerits of a Balanced Budget :

- (1) Economic growth and welfare may be curtailed if governments have to restrict expenditures and economic activities to match the income.
- (2) If government does not restrict expenditures and if it raises taxes in order to increase incomes to match the excess expenditures then people have to bear excessive tax burdens.

Adam Smith was in favour of balanced budget. But J. M. Keynes asserted that in case of balanced budget, governments do not spend enough to maintain full employment. In other words in order to maintain full employment, governments must incur more expenditure in the economy if required.

10.5 Unbalanced Budget

The total expenditure and total income in such a budget are not equal. Accordingly this budget can be : (1) A deficit budget (2) A surplus budget

10.5.1 Deficit Budget : In this type of budget, the government's anticipated total expenditure is more than the anticipated total income. Deficit budget = anticipated total expenditure > anticipated total income

In present times, government budgets are mostly deficit budgets. Any economy which is developing usually spends more than the incomes as expenditures on development activities like education, social welfare, creation of public utilities etc. are higher; While owing to lower economic development income from taxes and other sources are lower.

10.5.2 Surplus Budget : A surplus budget is one in which the government spends lesser than its total anticipated income.

This means the government is collecting more revenues from citizens by way of taxes than what it is spending for the citizens. The overall development and welfare activities will be lower in the economy. In reality most governments do not do this. This type of budget is usually seen in developed countries.

10.6 Merits of a Deficit Budget

(1) This budget is known to promote development and welfare activities.

(2) In times of low economic activity, the government spends more in the economy for investment and creating employment. Thus, the economy gets a boost during depression and economic growth can pick up.

(3) The tax burden upon people is lower in proportion of economic activity as expenditures are high and incomes are lower and taxes are a source of income for the government.

10.7 Demerits of a Deficit Budget

(1) In order to meet the deficit governments borrow, thus increasing debt burdens in the economy.

(2) Deficit in the budget also shows that governments do not have control on expenditures.

(3) In case of high deficits, it can also be concluded that the tax revenues collected from public is going in wasteful expenditures.

10.8 Merits of a Surplus Budget

(1) This budget is useful in times of severe inflation. When the government spends lesser; employment, income and demand reduce and inflation can be restricted.

(2) There is no burden of borrowing in this type of a budget.

(3) Savings of the government increase which can be used for development in future periods.

10.9 Demerits of a Surplus Budget

(1) People are made to pay more taxes to enhance government incomes but the welfare they receive from government spending reduces.

(2) If there is no inflation (or there is deflation) then lower spending will result in lower investment, employment, income and production which may lead to depression in the economy.

(3) If the surplus in the budget persistently rises for several years then there may be problems arising out of excess savings.

10.10 Accounts of a Budget

In order to thoroughly understand the concept of a budget, it is necessary to get an idea of the accounts of a budget. By the rules of accounts, every budget has two sides. (I) the credit side where the revenues (incomes) of the government are recorded and (II) the debit side where the expenditures of the government are recorded. Further classification on both sides is as under :

10.10.1 On the Credit Side : There are two accounts on the credit side. (1) Current incomes (revenue incomes), (2) Capital incomes.

10.10.1.1 Revenue Income : The direct and indirect taxes, profits of public enterprises, fees and fines from public utilities etc. constitute the revenue income. It is also called current income as the receipts and expenditures are made on transactions of the current period.

10.10.1.2 Capital Income : These receipts are from transactions which have long term or continuous impacts on government funds. Income generated by the government in the form of borrowings from the market in own country and abroad, borrowing from central bank, income from disinvestment etc. are recorded in this account.

10.10.2 On the Debit Side : There are two accounts on the debit side also (1) current expenditures, (2) Capital expenditures.

10.10.2.1 Current Expenditures : These are expenditures made in the current year on salaries of government employees, interest payment on loan taken by the government, pension, subsidies, grants, current expenses on defence, etc.

10.10.2.2 Capital Expenditures : These are expenditures on transactions which have long term or continuous impacts on government funds. This account includes loans given by the government to other governments, repayment of previously taken loans, capital expenses on social and economic services, as well as capital expenses on defence etc.

Thus a budget has two accounts. (A) Current account which records current incomes and expenditures and (B) Capital account which records capital incomes and expenditures.

10.11 Goods and Services Tax (GST)

Under democracy, a country has to incur expenditures after wide spread activities. Besides, a developing economy has to make increasing investments in public utilities. To meet increasing expenditures, a state (government) must raise incomes.

Taxes are an important source of revenue/income for a state (government). Taxes are classified in two broad categories as : Direct taxes and indirect taxes.

In India, all forms of government viz., central, state and local governments have been collecting various types of indirect taxes. However, the government of India made constitutional amendments and introduced a common tax called Goods and Services tax in lieu of many indirect taxes. GST became applicable from July 1, 2017.

A Common tax introduced in lieu of several indirect taxes imposed by the central and state governments in India came to be known as the Goods and Services Tax (GST)

10.11.1 Meaning :

- The Goods and Services tax (in short known as GST) is an indirect tax levied on the supply of goods and services.
- The common tax introduced by replacing various indirect taxes levied by central and state government on Goods and services is known as Goods and Services Tax (GST)
- It is an indirect tax
- It has encompassed several indirect taxes which were earlier imposed by central and state governments.
- The administrative authority for GST is the GST Council. The finance minister of India is stated to be the chairperson of the council and the finance ministers of state are stated to be the members.

The indirect taxes replaced by GST are noted as :

(A) Indirect taxes of the centre replaced by GST like,

1. Central Sales Tax (CST)
2. Central Excise Duty (and additional excise duties)
3. Additional Custom Duties
4. Service Tax

(B) Indirect taxes of the states and union territories replaced by GST like,

1. Value Added Tax (VAT)
2. Purchase Tax
3. Octroi
4. Sales Tax
5. Entertainment Tax and Entry Tax

Thus, several indirect taxes are replaced by only one tax on goods and services. However, the basic custom duty is not substituted by GST.

10.11.2 Reasons for introduction of GST : In the federal system of governance in India, most of the direct taxes are collected by the centre. Whereas, indirect taxes of different types are collected by the centre as well as by the states.

States collect indirect taxes to meet their expenditures however, prior to GST, the rates of the same type of tax were different in different states. Besides, the same good/service was taxed by the centre as well as the state. Moreover, when a good/service was transported from one state to another, Both the

states levied a separate indirect tax on it. Hence, the burden of tax and the administrative effort of variety of taxes on the same good/service also increased. Hence, GST was introduced to:

- (1) Impose a single tax on a single good/service by elimination of multiple taxation on a single good/service.
- (2) Eliminate the difference in tax rates between states for similar goods/services.
- (3) Reduce the cost of tax collection and ease the administration of indirect tax collection.
- (4) Make digital procedures of tax collection less complicated.
- (5) Reduce tax evasion and avoidance and make the indirect tax structure more productive (in terms of raising revenues).
- (6) Reduce the burden of indirect taxes on people.

10.11.3 Types of Goods and Services Tax: In India, GST is classified in two broad categories.

(1) The first category includes CGST and SGST/UTGST (2) IGST

The production and sale of goods and services is categorised as those produced and sold within a single state and those produced and sold between states. The categories of GST are based on this difference.

(1) CGST and SGST/UTGST

If a good/service is produced within the same state or union territory then two types of GST are levied viz., (A) CGST: Central GST which is a rate charged as centre's tax.

(B) SGST/UTGST: State GST which is charged as the State's tax. In case the production and sale is within a union territory, it is called UTGST.

E.g. if a good is produced in Ahmedabad and sold in Bhavnagar and the rate on such a good is 18% and the cost of the good is ₹ 100 then GST is imposed as,

$$\text{CGST } 9\% = ₹ 9$$

$$\text{SGST } 9\% = ₹ 9$$

$$\text{Total } 18\% = ₹ 18 \quad (\text{₹}100 + ₹18 = ₹118 \text{ is the price which the final consumer pays})$$

(2) IGST (Integrated Goods and Services Tax)

If a good produced in one state is sold in another state then the applicable GST rate is IGST. E.g. if a good produced in Ahmedabad is sold in Mumbai then IGST is applicable. If value of the good is ₹ 100 and the IGST rate for this product is 18% then

$$\text{Cost} = ₹ 100$$

$$\text{IGST} = ₹ 18 @ 18\%$$

$$\text{Final Price} = ₹ 118$$

10.11.4 Enforcement of GST : GST was introduced from July 1, 2017 after making constitutional amendment. It replaced about 17 different indirect taxes which were imposed by the central and state governments in India.

The following are some important enforcement areas of GST in India.

(1) **Respective rates of central and state indirect taxes** were determined by the centre and state with different considerations. With one GST for the whole country, emerged the need to have one nodal agency to determine rates and regulate the GST procedures. For this purpose the GST council was set up.

The chair person of this council is the Finance Minister of India and the finance ministers of states are its members. The council meets every three months.

2. Rates of GST : • In the beginning, 5 different rates of GST are determined for different types of goods and services.

i. Zero GST: Certain goods and services are exempted from GST and so these goods have a 0% rate of GST. Some of these goods and services are certain agricultural goods like vegetables, fruits, cereals, education and health services.

ii. Levels of Rates: Other goods and services are taxed at 5%, 12%, 18% and 28% depending on the type of needs which they satisfy. 28% rate is imposed mostly on entertainment and luxury goods and services.

iii. Compensation to states: There is a bill to provide compensation for 5 years from introduction of GST to states that suffer loss of revenue owing to introduction of GST.

As an immediate effect of GST, some states would gain while some would incur revenue loss owing to GST.

iv. Goods and Services kept outside the realm of GST

In the initial phase, certain goods and services are kept outside the purview of GST. These are taxed according to the earlier rates of various indirect taxes. Gradually these goods may be brought under the purview of GST. These are:

- a. Alcohol
- b. Petroleum products (Petrol, diesel, crude, Aviation Turbine Fuel (ATF) and natural gas)

10.11.5 Tax Credit Scheme

Earlier, there was no provision under indirect Tax System for input Tax credit on indirect Tax paid, but now GST allows for input Tax credit. GST paid by the trader at the time of purchase of goods is deductible from GST payable at the time of sale of the same goods. e.g., when a trader pays GST of ₹ 35,000 at the time of purchase of goods and if ₹ 40,000 is payable as GST on sale of the same goods, GST paid ₹ 35,000 at the time of purchase is deductible from GST payable ₹ 40,000 on sale of the goods and the trader requires to pay net amount of ₹ 5000 as GST.

10.12 Idea of Budgets of Different Tiers of Governments in India

Let us now get an idea of the budget of the three tiers of government in the Indian federal system viz., Central government, State governments and local governments (Municipal corporations, Municipalities and Panchayats).

10.12.1 Concept of Union Budget (Central Government's Budget) : In India the Central Government's budget is presented by the Finance Minister in the Lok Sabha usually in the last week of February every year and the Lok Sabha approves the budget after discussions and if necessary, amendments are made later. The budget is effective from April 1 to March 31 of the next calendar year.

An Idea of the Budget of Central Government in India :

Current (Revenue) Account of Central Government's Budget	
↓ Income (Credit)	↓ Expenditure (Debit)
(1) Tax revenue	(1) Non – plan expenditures (are incurred on programmes for various sectors which are not detailed in the plans) such as :
(A) Revenues from direct taxes (B) Revenues from indirect taxes (C) Indirect taxes from goods and services which are not covered under GST (D) Tax revenues from union territories	(A) Interest payments (on loans borrowed in earlier periods) (B) Social services like education, health, public utilities and administration and general services (C) Economic services like agricultural services, industries, electricity, transport, technology etc. (D) Non-plan Grants and assistance given by centre to states and union territories (E) Current expenses on defence (F) Subsidies (G) Salaries, Pensions etc.
(2) Incomes other than tax incomes	(2) Planned expenditures (are incurred on programmes for various sectors which are detailed in the plans) such as :
(A) Interest incomes earned from loans given by the centre in earlier periods (B) Profits and dividends from public sector enterprises (C) Fees and fines from public utilities (D) Assistance received from abroad	(A) Agriculture, industries, irrigation, information and communication, energy, minerals, transport and such sectors (B) Planned grants and assistance given to states and union territories
Capital Account of Central Government's Budget	
↓ Income (Credit)	↓ Expenditure (Debit)
(1) Recovery of Loans (2) Borrowings (3) Other capital incomes like those from disinvestment, small savings schemes etc.	(1) Repayment of loans borrowed earlier (2) Loans given to other governments (3) Capital expenditure on social and economic services (4) Capital expenditure in defence

Note : The expenditure of central government is classified into plan and non – plan expenditures (changed in budget of 2016). While the expenditure of state governments is classified into developmental and non – developmental expenditures.

Developmental expenditure means expenditure which provides a direct boost to economic development. For example, expenditure on irrigation. Non-developmental expenditure means the expenditure which does not have a direct impact on development. For example, expenditure on pensions.

10.11.2 An Idea of the Budget of the State Governments in India : The states in India have less productive income sources than the centre while they have greater responsibilities to fulfil in several sectors. The following table gives an idea of the accounts of a state budget.

Current (Revenue) Account of State Budget	
↓	↓
Income (Credit)	Expenditure (Debit)
<p>(1) Share which a state receives from tax revenue of centre upon recommendations of Finance Commission</p> <p>(2) Taxes of the state</p> <p>(A) Tax on agricultural incomes which does not exist at present</p> <p>(B) Land revenue</p> <p>(C) Stamp duty</p> <p>(D) State excise duties</p> <p>(E) Sales tax/Value added tax</p> <p>(F) Vehicle tax</p> <p>(G) Electricity duties</p> <p>(H) Entertainment tax</p> <p>(I) Others</p> <p>(J) Vehicle Tax</p> <p>(K) Tax on electricity</p> <p>(3) Indirect taxes from items not covered under GST</p> <p>(4) Other Incomes like grants from other governments, gifts etc.</p>	<p>(1) Developmental</p> <p>(A) Social services like education, health, nutrition, family welfare, water supply, sanitation, welfare of SC, ST, OBC and so on</p> <p>(B) Economic services like, agriculture, rural development, irrigation, industry and minerals, transport and communication, science, technology and environment and so on.</p> <p>(2) Non-developmental</p> <p>(A) General services like administration, interest payments, pensions, fiscal services and so on</p> <p>(B) Other expenses : including grants to states</p>
Capital Account of State Budget	
↓	↓
Income (Credit)	Expenditure (Debit)
<p>(1) Public debt</p> <p>(A) Internal debt of the state</p> <p>(B) Loans and advances from centre</p> <p>(C) Ways and means advances, advances for projects</p> <p>(2) Recovery of loans given to other governments in previous periods</p> <p>(3) Other capital incomes : e.g. those obtained from disinvestment</p>	<p>(1) Developmental :</p> <p>(A) Capital expenditure on social services</p> <p>(B) Capital expenditure on economic services</p> <p>(2) Non-developmental :</p> <p>(A) Capital expenditure on general services and administration</p> <p>(B) Repayment of loans taken in previous periods</p> <p>(C) Other expenses : Loans and advances to local governments</p>

10.12.3 Budget of Local Governments : In India local governments are called Municipal corporations in big cities, Municipalities in smaller cities, District (Jilla) Panchayats in districts, Taluka panchayats in talukas and Gram panchayat in villages. Constitution has suggested the role of these governments and these governments can also collect some income of their own.

The main functions of local governments pertain to water supply, water pumps, sewage, roads, cleanliness, public health, electrification of their concerned region and so on.

Idea of the Budget of a Municipal Corporation	
Current (Revenue) Account	
↓	↓
Income (Credit)	Expenditure (Debit)
(1) Income obtained from state government (A) Grants, subsidy and contribution (B) Project grants from state government	(1) Expenses to get Grants, subsidy and contribution
(2) Octroi (Abolished in Gujarat)	(2) Loan charges
(3) Property tax (A) General tax (B) Water tax (C) Vacant Land tax	(3) Establishment expenditure on salaries, pensions and so on
(4) Other taxes (A) Vehicle tax (B) Entertainment tax (C) Education cess	(4) Administrative expenditure on telephone bills, stationery and so on
(5) Incomes other than tax incomes : Usually collected as per rules (A) Fees on use of Municipal property (B) Fees collected from public places (C) Fees collected against public services etc.	(5) Expenses on electricity and fuel
	(6) Maintenance expenses
	(7) Expenses on organizing functions

Capital Account	
↓ Income (Credit)	↓ Expenditure (Debit)
(1) Grants received from state government (2) Capital gains from property owned by the corporation (3) Borrowed (debt) capital (4) Other capital incomes For example, funds for housing schemes from state government	(1) Expenses on infrastructure (2) Purchase of transport vehicles (3) Purchase of machinery, tools, equipments and so on.

10.13 Functions of a Panchayat and its Sources of Revenue

Panchayati Raj Institution is the oldest method of local governance in Asia. Panchayat means 'an assembly of five'. In India for rural administration, district Panchayats, taluka panchayats, gram Panchayats are a part of the three – tier government. According to the Constitution of India, panchayats in their respective areas can prepare a plan for economic development and social justice and also execute it. Different states have various forms of Panchayati Raj Institutions. To facilitate this, states must devolve functions to them. Several functions are mentioned in their list of responsibility by the Constitution of India. States also provide them finances as per recommendations of State Finance Commissions. Responsibilities are executed by various committees called 'gram sabhas/samatis' (or may be called by other such names).

The Panchayati Raj Act has provided greater strength to these institutions and now they do not have to depend too much on recommendations of state finance commissions and upon the state governments but they get some funds in their accounts directly from the centre. Thus, they are financially better off than before and also enjoy greater decision making power.

10.13.1 Sources of Income of a Panchayat

- (1) Share in state taxes as suggested in the constitution and by the state finance commissions.
- (2) Grants received directly from central government.
- (3) Funds from the state government to execute development projects announced by the state government.

10.13.2 Functions of a Panchayat (Items of Expenditure) : Panchayats are mainly responsible for water supply, water pumps, sewage, roads, cleanliness, public health, electrification of their concerned region and so on.

10.14 Types of Deficits in a Budget

Budgets can be balanced or unbalanced between total income and total expenditure. An unbalanced budget can have a surplus or a deficit. The types of deficits in a budget with specific reference to India are :

10.14.1 Revenue Deficit : Revenue deficit arises when total expenditure of the government on revenue (current) account is more than total receipts of the government on the revenue account.

Revenue account contains current transactions of the government and a deficit in this account in a simple sense means that the government is not able to meet its routine expenditures from its current income. This shows inefficient working of government machinery. Such a deficit can be met by greater borrowings on the capital account.

10.14.2 Budgetary Deficit : When the total expenditure (current as well as capital) is greater than the total income (current as well as capital) in a budget then budgetary deficit is said to have arisen.

The central government incurs deficit financing (borrows from RBI) to meet this deficit and the state governments borrow more from the central government which is called overdraft.

10.14.3 Fiscal Deficit : The borrowings of a government from the market are considered as income

on the capital account. However this is a debt created by the government and must not be included as a source of income. Hence if market borrowings are added in the budgetary deficit then we get fiscal deficit. Fiscal deficit is therefore higher than budgetary deficit. In other words,

Fiscal deficit = total expenditure – total income (excluding market borrowings)

10.14.4 Primary Deficit : This is a relatively new concept in Indian budget. Primary Deficit is obtained after deducting interest payments from fiscal deficit. Interest payments constitute an important part of government expenditures. But, these are not expenditures actually incurred on current activities but are an inevitable burden to be paid for amounts borrowed in the past. Hence, this concept of deficit takes out interest payments from fiscal deficit. This concept doesn't have policy significance.

10.15 Effects of Preparing a Budget

The entire exercise of preparing a budget has the following effects :

(1) It brings fiscal discipline in governments as there is an attempt to incur expenditures in accordance with incomes to keep deficits in control.

(2) It justifies allocation of resources among various sectors according to need and priority.

(3) It gives direction to investment by allocating budgetary funds in various sectors and regulates demand by regulating the disposable incomes of people by imposing right amount of taxes.

(4) By using the instrument of taxation and directing expenditures in the necessary sectors, a budget also helps in providing stabilization against inflation and deflation.

(5) A budget helps to fulfil a nation's/state's objectives pertaining economic growth and development.

Exercise

1. Choose correct option for the following from the options provided :

(1) How many tiers of government are mentioned in the Indian Constitution ?

- (A) One tier (B) Two tier (C) Three tier (D) Zero tier

(2) What is meant by a 'Panchayat' ?

- (A) An assembly of 5 persons (B) An assembly of 50 people

- (C) An assembly of 500 people (D) An assembly of 5 villages

(3) Who of the following favoured the concept of balanced budget ?

- (A) Adam Smith (B) Marshall (C) Keynes (D) Hicks

(4) Education is the responsibility of which government ?

- (A) Central Government (B) State Government

- (C) Local Government (D) Joint responsibility of centre and state

(5) What does the government do with its expenditure during inflation ?

- (A) Keeps it stable (B) Reduces it (C) Increases it (D) Makes it zero

- (6) Upon whose recommendations do the States get a share from revenues of the Centre ?
 (A) Planning Commission (B) Finance Commission
 (C) NITI Ayog (D) Central government
- (7) Which of the following concepts of deficit does not have policy importance in India ?
 (A) Revenue deficit (B) Budgetary Deficit (C) Fiscal Deficit (D) Primary Deficit
- (8) Which of the following taxes is subsumed by GST ?
 (A) Income Tax (B) Gift Tax (C) Wealth Tax (D) Service Tax

2. Answer the following questions in one sentence :

- (1) What is meant by a budget ?
- (2) How many sides are there in the accounting statement of a budget? Which are those ?
- (3) Mention some areas in the list of joint responsibility of the centre and the states.
- (4) Who presents the budget generally in the lok sabha ?
- (5) What is meant by a deficit budget ?
- (6) Which is the general time period for which a budget is made ?
- (7) What is meant by revenue (current) income ?
- (8) What is meant by development expenditures ?
- (9) Which expenditures are included in the non developmental expenditures ?
- (10) State the sources of income of Panchayat.
- (11) From which year was Goods and Services Tax (GST) introduced in India?
- (12) Who becomes the chairperson of the GST council?

3. Answer the following questions in short :

- (1) Explain how resources are re-allocated through a budget?
- (2) Explain the types of budget.
- (3) Give the merits of a surplus budget.
- (4) Give the meaning of Goods and Services Tax (GST)
- (5) In how many categories is Goods and Services Tax (GST) classified ? Which are those?
- (6) Give the full form of GST, CGST, SGST, UTGST, IGST.

4. Answer the following questions in brief points :

- (1) Give the meanings of Revenue deficit, Budgetary deficit, Fiscal deficit and Primary deficit.
- (2) Discuss effects of a budget.
- (3) Explain the concepts of –
 (A) Revenue expenditure (B) Revenue income (C) Capital income (D) Capital expenditure.
- (4) Give details of the income and expenditure sides of the capital account of a state budget.

- (5) Give the functions and sources of income of 'Panchayats'.
 (6) Give the reasons responsible for introduction of GST in India.

5. Answer the following questions in detail :

- (1) Give the meaning and objectives of a budget.
 (2) Give details of the budgetary accounts of the central government of India.
 (3) Write a note on budget of a state government in India.
 (4) Explain the various types of deficits in a budget.
 (5) Write a detailed note on important aspects pertaining to enforcement of Goods and Services Tax (GST) in India.

Glossary

Budget	: A government budget is an annual accounting statement of the item –wise estimates of expected revenue and anticipated expenditure of the government for a new financial year
Balanced budget	: A type of budget in which the government's estimated total expenditure is just equal to the estimated total income.
Unbalanced budget	: A type of budget in which the government's estimated total expenditure is not equal to the estimated total income.
Surplus budget	: A type of unbalanced budget in which the government's estimated total expenditure is less than the estimated total income.
Deficit budget	: A type of unbalanced budget in which the government's estimated total expenditure is more than the estimated total income.
Current (Revenue) account	: The account showing current incomes and current expenditures in a budget is called the current account of a budget.
Capital account of a budget	: The account showing capital incomes and capital expenditures in a budget is called the capital account of a budget.
Current (Revenue) Receipt	: In the current period, the direct and indirect taxes, profits of public enterprises, fees and fines from public utilities etc. constitute the revenue income.
Current (Revenue) expenditure of a budget	: These are expenditures made in the current year on salaries of government employees, interest payment on loan taken by the government, pension, subsidies, grants, current spending on defence etc.
Capital Receipt	: These receipts are from transactions which have long term or continuous impacts on government funds. Incomes generated by the government is the form of borrowings from the market in own country and abroad, borrowing from central bank, income from disinvestment etc. are recorded in this account.
Capital expenditure	: These are expenditures on transactions which have long term or continuous impacts on government funds. This account includes loans given by the government to other governments,

	repayment of previously taken loans, capital expenses on social and economic services, as well as capital expenses on defence etc.
Revenue deficit in a budget	: Revenue deficit arises when total expenditure of the government on revenue (current) account is more than total receipts of the government on the revenue account.
Budgetary deficit	: When the total expenditure (current as well as capital) is greater than the total income (current as well as capital) in a budget then budgetary deficit is said to have arisen.
Fiscal deficit in a budget	: If market borrowings are added in the budgetary deficit then we get fiscal deficit. Fiscal deficit is therefore higher than budgetary deficit. In other words, fiscal deficit = Total expenditure – total income (excluding market borrowings)
Primary deficit in a budget	: Primary Deficit is obtained after deducting interest payments from fiscal deficit.
Goods and Services tax	: <ul style="list-style-type: none"> •The Goods and Services tax (also known as GST) is an indirect tax levied on the supply of goods and services. •The common tax introduced by replacing various indirect taxes levied by central and state government on Goods and services is known as Goods and Services Tax (GST)
SGST	: State Goods and Services Tax
CGST	: Central Goods and Services Tax
UTGST	: Union Territory Goods and Services Tax
IGST	: Integrated Goods and Services Tax



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Introduction

The thoughts related to human life and economic activities like management of economy, production, revenue, distribution, employment, money, exchange, economic development, banking, solutions to financial and environment problems are referred to as economic thought.

Many great thinkers in various countries have influenced decisions of state administration regarding management of resources, production, cost, distribution etc. Adam Smith's ideas provide insights into how wealth is created, distributed and exchanged; Prof. Alfred Marshall provided

importance of keeping human welfare at the centre of decision making; Prof. Robin's provoked ideas pertaining to scarcity, problem of choice and optimum utilization of resources; while Prof. Keynes provided a new direction to macroeconomics by giving principles regarding consumption, investment, employment and government intervention after the great depression of 1929-30. Thus such people contributed to modern economic thought in the west.

Economic ideology is also reflected in Indian scriptures. 'Shantiparva' in 'Mahabharat', 'Manusmriti', 'Shukra-niti', 'Kamandikiya' reflect thoughts pertaining to economics. In the Indian writings, 'Kautilya's Arthshashtra' ranks foremost.

Number of thinkers have influenced Indian economic thought from the ancient times, to the medieval times to the present day. This chapter gives an idea of the economic thoughts of 'Kautilya', 'Gandhiji' and 'Pandit Deendayal Upadhyaya'.

11.1 Kautilya (Chanakya)

11.1.1 Introduction : Kautilya who authored 'Arthshashtra' was a strategist scholar who dreamt of a perfect state. Born with teeth, the son of a Brahmin Chanak, Chanakya's real name was Vishnu Gupta. Spending his childhood in the village Kusumpur of Patiliputra Kingdom, Kautilya during third century B.C. aided Chandra Gupta to end the tyrant rule of Dhanananda, the last heir of the Nanda race, using moral values and strategy to create a prosperous state. Studying minutely the subjects of Politics, law, economics, management, taxation, social order, trade, agriculture and industry, he wrote an exclusive text named 'Arthshashtra' which was widely known as 'Kautilya's Arthshashtra'.

11.2 Economics of Kautilya

The idea of state management in India is as old as its culture. Ancient literature of India has references of ideal methods of politics and diplomacy, policy making, rules of governance, 'dandniti' (policy of punishment by the state) etc. Solution to present day economic problems can be found in literature of olden times and philosophy given by sages. Such philosophy given thousands of years ago provide practical guidance for making individual life as well as social life easier. Kautilya's 'Arthshashtra' was one of those literatures. This volume found by Pandit Shyam Shashtri from the oriental library of the king of Mysore, was written in 'Granthlipi' on 'Bhojapatra'. In 1909 he compiled and published the whole 'Kautilya's Arthshashtra'. According to him this work was created around 321-300 B.C.

Kautilya's thoughts are based on the idea of 'arth'. For him the key to governance and authority lies in 'arth'. According to Kautilya, a person who is devoid of resources can also manage to obtain 'arth' by labouring. With increase in labour productivity the means of production also increase. Thus he calls manual labour as the true 'arth' and explains, "The intention of a human being is 'arth'; the piece of land with human settlement is 'arth' and so the science that gives solution pertaining to maintenance of land and attaining benefits from land is 'arthshashtra'". Thus he considers land as an asset for livelihood and settlement of humankind and hence considers it important to describe the science pertaining to its maintenance and benefits. Kautilya's 'shashtra' is apt to the role of state in various times periods. Thus, his 'arthshashtra' in reality is the science of policy making. In his work of 15 volumes, Kautilya has depicted the strategies for domestic administration, relations with neighbouring states; knowledge about medicinal plants and political diplomacy.

Main Economic Thoughts of Kautilya :

11.2.1 Establishment of Statehood : While establishing a state, the king should provide basic resources for development, make continuous efforts for the development of agriculture and industry as well as, excavate mines, develop forestry, cattle rearing and markets; as also open up import – export trade avenues. The king should aid in constructing water reservoirs for farming, temples and ‘dharamshalas’ (guesthouses). Teachers, priests and soldiers must be exempted from taxes during times of natural calamities helpless farmers must be looked after by the king.

11.2.2 State Treasury : State treasury plays a pivotal role in ways and means suggested by Kautilya to maintain prosperity and safety of a state. The unity, stability and administration of the state are directly dependent on the state treasury. So the king is advised to guard his treasury and always develop new means to increase it. Kautilya has shown 7 sources of income for the state, which include (1) Towns (2) Villages (3) Irrigation (4) Mines (5) Jungle (6) Animal husbandry (7) Trade and Commerce. He has emphasized that the king should collect taxes once in a year and not use forceful means to increase the treasury. It is also advised to refrain from harshness while collecting taxes from regions facing famine and drought. Kautilya has also hinted on the use of public property, promotion of trade, gifts, penalties fines and rewards; as also production of cash crops to ameliorate the state treasury.

Much of state treasury consists of physical (tangible) goods and therefore it is necessary to preserve such goods in proper warehouses and use them for public welfare as required. Kautilya also specified the rates of taxes (amount of taxes) for various categories of workers. For example, one fourth of the agricultural production may be collected as tax from individual farmers; one half of the produce may be collected as tax from individual manufacturers of cotton, wool, silk, wax and medicines. This way he suggested taxes for other occupations also. The perceptions of a welfare state in Kautilya’s ideas are useful even today in formulation of welfare plans by a state for its people.

11.2.3 Taxation Policy: Kautilya gave clear principles of taxation which indicate the type of short term and long term tax policies which a state should have; the limits of tax rates which a king may impose and so on. Provisions for increasing tax rates during emergencies are also presented. Taxes should be collected from citizens as ripened fruits are collected from orchards keeping in mind the economic ability of citizens to pay taxes. He laid down such principles of taxation which make the taxation process simple, less expensive and less complex. In this context, he suggested the following types of taxes in the tax structure:

11.2.3.1 Land Tax : The state had the right to collect a portion of the agricultural produce as tax from the farmer or the landlord. Keeping in mind the type of land, its productivity, form of product, mode and availability of irrigation, Kautilya had devised rules to decide the proportion of taxes. He also proposed tax exemptions as an incentive to increase productivity.

11.2.3.2 Import-Export Taxes : Import – export taxes are classified by Kautilya as:

(1) **External Charges (Taxes) :** For the material produced in the country.

(2) **Internal Charges (Taxes) :** For the material produced in the state or the capital.

(3) **‘Aatithya’ Charges (Taxes) :** For the material imported from foreign regions or states.

On the basis of type of goods and their importance in economic life, Kautilya gave rules for commodity taxation. He proposed setting up of booths for collection of customs and octroi. He also proposed rules for road tax and wealth tax.

11.2.4 Agriculture and Animal Husbandry : Kautilya named agriculture as the primary means of livelihood. He classified land in two types: (1) land under state ownership and (2) land under ownership of private individuals. He further suggested that the state owned land should be tilled by people who were otherwise made slaves by the society, prisoners and the other agricultural labourers. He believed that land should be used mainly for agricultural purpose and hence the uncultivable land should be made cultivable. Taxes can be collected from the farmer only if she/he cultivates her/his land and in return earns a livelihood.

Animal husbandry is also related to agriculture, therefore Kautilya has also included it as a means of livelihood and has suggested means for its development. In this regard he mentioned 3 categories of animals as : (1) Trained / pet animals (2) Dairy animals (3) Wild animals. Kautilya has also suggested rules and penalties related to animal husbandry.

11.2.5 Industry : Kautilya believed that only a resourceful state can prosper and develop and hence he gave directions for setting up industries. According to him, a king should explore the possibilities of new mines and thus order excavation, develop art and craft industry to use skills and promote skill formation, promote transport and communication as also create infrastructure for industrial development. He further suggested setting up of proper markets in towns/cities to facilitate the sale of the produced wares.

It is evident from 'arthshashtra' that his thoughts were provoked by economic problems and political concerns. He has incorporated the minutest details in building of a progressive and modern state and gave theories which have universal acceptability and are applicable even in present times. Even though his work 'Arthshashtra' was created for Magadh state and for Emperor Chandragupta Maurya, he wished that this work could be of use to those kings who desired timeless victories and a proper management of the state. Kautilya has opposed the act of tax evasion and hiding assets from the state.

11.3 Gandhiji

11.3.1 Introduction : Societies change continuously; and the purpose of change is development of the society. Such changes occur as phases of transformation, and in each phase of transformation the society tends to follow the ideas and ideals of some reformer. Thus, the reformer in a way leads the change in the society (becomes the torch bearer, provides direction). Born at Porbandar in Gujarat, Mohandas Karamchand Gandhi whom we know as Gandhiji was one such leader. Though he had a strong will power and was an idealist dreamer, he urged for a realistic and practical approach. Truth and non-violence were the two major principles of his ideology. He practised his ideology to remove the difference between thought and conduct. He emphasized on religion and ethics for individual and social life. Besides, he also made endless efforts towards eradicating untouchability, persuading people to stop consumption of alcohol, attaining communal solidarity and empowering women. His way of living life was based on ethics. So he accepted ethical science as the base of the science of politics and economics.

Gandhiji's simple way of life in social, economic and political terms is frequently known as 'Gandhism'. But unlike other economists Gandhiji had not given a specific ideology. He didn't classify

his ideology into any specific category. He never wanted to give 'Gandhism' nor wished to have his own followers. He didn't claim that he had discovered any new theory or ideology. He simply tried to apply the eternal truths as solutions to life's routine problems.

11.3.2 The Influence of Books and Thinkers on Gandhiji : We can see the influence of religious books, philosophers and events on Gandhiji's economic, social and political ideology.

(1) Gandhiji was greatly influenced by the American thinker Thoreau. The idea of 'Simple living and high thinking' was adopted from Thoreau's works.

(2) Gandhiji's idea of 'Sarvodaya' was an inspiration from British writer John Ruskin's book 'Unto the last'. From that book, he derived the importance of labor work and ways to eradicate poverty from India.

(3) Leo Tolstoy's works, 'What shall we do then ?' and 'The Kingdom of God is within you' influenced Gandhiji. He was influenced by the theory of 'bread labour' given by Ruskin, and thus he gave the motto that those who didn't work had no right to eat.

Moreover, in his childhood watched the play 'Satyawadi Raja Harishchandra' and this left an indelible impression on him. The play taught him the importance of truth and made him a 'Satyagrahi'.

Gandhiji's beliefs pertaining to 'labouring for one's own bread' were also confirmed by a shloka in the third chapter of Hindu Scripture the 'Bhagwad Gita' which states, "One who relishes the fruits without making offerings (without efforts and sharing fruits with others), is indulging in sinful action". There also is an impact of scriptures like, the 'Upnishads', the 'Ramayana', 'Mahabharata' and of saint poets like Kabir, Gurunanak, Narsimha Mehta and also of spiritual leader (Guru) Shrimad Rajchandra on Gandhiji's ideas.

11.4 Main Economic Thoughts of Gandhiji

Gandhiji believed that neither capitalist nor socialist economic approach would be able to solve the economic problems of India. So he gave alternative economic ideas against western capitalist production policies, excessive use of machinery and materialist philosophy.

11.4.1 Sarvodaya : Gandhiji envisioned a society devoid of violence in which the helpless, poor and needy are uplifted to a state of wellbeing; and this idea of social development was called 'Sarvodaya' which means, 'upliftment of all'. According to the 'Bhagwad Gita', in all human beings dwells the same soul and adopting this thought Gandhiji based the principle of 'sarvodaya' on mutual cooperation and love. He further suggested that 'sarvodaya' type of socialism may be attained by forsaking desires which lead to greed. For successful implementation of 'Sarvodaya', he presented the ideas of renunciation, service, reducing dependence on machinery, protection of labour, decentralization of power and prevention of exploitation. He disliked the thought that very few people became rich due to the impact of machinery and industry. For him socialism means that there are no differences between people, and that all are equal.

11.4.2 Importance of Labour : Gandhiji promoted the idea of equitable remuneration for different types of labour. Labour is the only living factor of production. So anyone who labours is entitled to live a dignified life and there should be enough opportunities for all to work. He believed

that it was obligatory upon the state to create employment opportunities. Stating the importance of labour Gandhiji asserted that though mental/intellectual labour was important for development, everybody should engage in some form of physical labour. Gandhiji observed a decline in dignity and importance of physical labour in modern times and thus he emphasised upon the idea that dedicated physical efforts make a person give up greed and enable the person to get employment and thus get freedom from poverty.

11.4.3 Use of Machinery : According to Gandhiji the era of machines was called so as machines dominated the production methods. Some critics called him an opponent of machines but he was never against appropriate use of machines. He was against the reckless use of machines which replaced human labour and rendered labourers unemployed.

The following points summarise his views regarding use of machines.

(A) Gandhiji recommended greater use of basic and simple machines that can be owned by and useful to poor producers.

(B) According to him, those machines which facilitate the work of labour must be employed but those which replaced labour and rendered labourers unemployed should not be used widely.

(C) Gandhiji did not oppose machines which are used for welfare of the poor.

(D) Machinery which reduces physical labour and saves time and funds can be widely employed. But he cautioned the society against the use of machines which enhanced profits of a single individual or few individuals. Machines must be used for benefitting the society as a whole.

(E) He was against the use of machines which led to concentration of economic power in the hands of a few people and became a means of exploitation of the poor by a few profit motivated rich people.

He asserted that machines are for human beings and human beings are not for machines and hence machines must not be used so widely that human beings become highly dependent on machines.

11.4.4 Decentralized Economy : Gandhiji favoured a decentralized economic system for India. He wanted economic power to be distributed among many Indians and not among a few people only. According to him, development of villages should be the central concern of any process economic development and he wanted villages to get equal benefits of development which can happen only through decentralized planning.

He gave the idea of decentralized economic planning as an alternative to capitalist planning and as a solution to the problems of centralized economies and thus he promoted the idea of increasing the use of 'khadi' and the idea of spinning khadi as a household industry (with the help of spinning wheel/'charkha'.)

The concept of decentralized economic planning was rooted in the idea of 'Gram Swaraj' (village empowerment/village self-reliance).

11.4.5 Simplicity and Non-Possession: The problems of economic life arise owing to greed and race for increasing material possessions by forgetting ethics. Which is why he propagated the idea of non – possession and consumption for needs and not for greed. He advised people to restrict

their wants and work towards contentment. For his own life, he followed the principle of 'simple living and high thinking'.

He stated the following reasons for restlessness in human life: (1) Continuously increasing wants (2) Use of complex machines (3) Distribution systems of present times (which create unequal distribution)

Explaining the relationship between wants and welfare, Gandhiji stated that welfare increases when wants are limited. Real happiness live in simple living. Production and distribution should be undertaken keeping in to consideration the needs of people (to each one according to her/his needs) He insisted upon the idea of, 'everyone's livelihood without anyone's exploitation.

11.4.6 Doctrine of Trusteeship : Trusteeship is one of the important principles given by Gandhiji. He gave this principle getting inspired by the 'Bhagwad Gita' and the 'Ishopanishad'. The Ishopanishad quotes, " All that is created on the earth is because of God and hence we must relish it after surrendering it". If a person has inherited and accumulated large amount of wealth she/he should form a trust of excess wealth. A person requires only as much wealth as is necessary for a dignified living. Wealth which is excess than that belongs to the society. The owners of wealth and capitalists can voluntarily act as trustees of their wealth. They will be allowed to retain the stewardship of their possessions and to use their talent, to increase the wealth, not for their own sake but for the sake of the nation and, therefore, without exploitation.

The important aspects of Gandhiji's doctrine of trusteeship can be summarized as under:

11.4.6.1 Convincing the Rich (Change of Heart) : Gandhiji was a worshipper of truth and non-violence. His principle of trusteeship was based on voluntary action.

Trusteeship was Mahatma Gandhi's peculiar contribution to the technique of social change. He called it 'the technique of change of heart'. Therefore confiscating the wealth of rich or by collecting it by imposing high taxes was not an appropriate way of redistributing wealth. Trusteeship to him meant — being responsible for one's life, as well as for the life of the neighbour. Rich are able to accumulate wealth because of resources obtained from the society and because some people remain poor. Hence the excess wealth must be used for benefitting the poor by forming a trust through which the rich themselves will undertake activities that benefit the poor. The society should inherit excess wealth and not the individual.

11.4.6.2 Duty Instead of Right : Gandhiji opined that a rich should feel the responsibility of using the excess wealth for benefits of the society rather than just asserting their right over wealth.

11.4.6.3 Awareness, Referendum and Social Change : Trusteeship is a source of revolution or radical social change. It cannot be brought about by force but by a voluntary social change. Gandhiji did not promote the idea of very high taxes and forceful confiscation of wealth of the rich. He said a public opinion can be built for bringing about a social change

11.4.6.4 Importance of the Interest of the Whole Society : Gandhiji believed in working for the greaeter good. It was better that a large number of people are benefitted instead of few individuals. Thus, Gandhiji emphasized on large scale production of goods which are the necessity of the masses. According to him, interest of the larger society is more important than that of a few individuals.

11.4.6.5 Compensation to the Trustee : Gandhiji believed that the state should have provision to compensate the trustees for their service.

11.4.6.6 Opposition to Nationalization : Gandhiji opposed the idea of nationalization of resources for production and the abolition of private property rights for bringing out economic equality. Such nationalization would decrease the morals and ethics of people and turn them against the state. Gandhiji opined that he would allow rich capitalists and landlords to retain the ownership of their possessions but would convince them to become trustees and use their wealth for good of the society.

11.4.6.7 Appointing the Successor : Gandhiji's idea of trusteeship also raises the question of appointing a successor to the wealth of the trust. According to Gandhiji, the legal owners of wealth should be the official trustees. There is no need to entrust the trust to the society or the state. The actual owner should act as a representative of the society. Thus, in a way the society will own the resources. However, the present trustee can name the successor who will be the trustee after her/his demise. And the new trustee will also be a representative of the assets and not an owner. The state or society can't seize the property of the trust. The successor should be appointed through a legal procedure. Gandhiji suggested that though the owner of wealth can name the successor to the trust, the state must monitor the functioning of the trust.

11.4.6.8 State Control : When the owners do not form a trust of their wealth voluntarily, the state can under certain cases direct the use of private wealth with minimum force or violence. However, he suggested this only for some forms of wealth and not for all types of wealth. This can be done after evaluating the ways in which wealth was accumulated. The state can take control of some types of private property after providing adequate compensation to the owner.

In the context of principle of trusteeship, Gandhiji stated three forms of ownership (1) Ownership with the private sector (2) Formation of a trust (3) Ownership with the public sector.

Gandhiji has also expressed his thoughts regarding, 'swadeshi movement', cooperation, importance of small, cottage and village industries, equality, dignity of women etc. His thoughts pertain to welfare and humanism. Modern day economists have drawn from Gandhiji's views from time to time to provide a new direction to the world. Solutions to the problems of poverty, unemployment, inequality, concentration of economic power etc. can be found in principles given by Gandhiji.

11.5 Pandit Deendayal Upadhyay

11.5.1 Introduction : Simple living, uncomplicated and gentle personality with sparkling eyes, profound philosopher, an integral humanist with eminence in politics and economics are words which define Pandit Deendayal Upadhyaya. Born on 25th September 1916, during his life of just 52 years, Pandit Deendayal philosophised and worked for the development of the country by including people from the lowest strata considering the economic condition of those times.

He presented his ideas on philosophy, economics, sociology and literature. He earned a name for himself working in the areas of social organization, journalism and politics. Some of his works are, *Rashtra Jivan Ki Samasyayen*, *Devaluation: A Great Fall*, *Political Diary*, *Rashtra Chintan*, *Integral Humanism*, *Rashtra Jivan Ki Disha*, *Bharatiya Arthniti: Vikas Ki Disha*, *Akhand Bharat Kyon?* His views on politics, economics and society are found in his works.

11.6 Main Economic Thoughts of Pandit Deendayal Upadhyay

11.6.1 The Search for the Third Option : The two practical systems of achieving economic goals which the world knew were capitalism and socialism. Pandit Deendayal presented a third option. He expressed that though there is an advancement in methods of production and use of machinery has increased; and the world has abundant resources human beings face many complexities and problems created due to the blind race for prosperity. Nations have attained economic growth and development by adopting capitalism or socialism but these systems have also created the problems of exploitation, inequality, economic instability, class struggle and pollution. India also blindly copied the western economic system and thus in spite of economic planning there are growing economic problems like; low productivity in agriculture and industries, insufficient rural infrastructure, poverty, unemployment, inflation, excessive urbanization, pollution, devaluation of Rupee etc. To overcome these difficulties, Pandit Deendayal suggested that the third option against capitalism and socialism is 'an integral economic policy' which is based on 'integral humanism'.

11.6.2 Integral Humanism : Pandit Deendayal is the advocate of Integral Humanism. He advocated it for economic policies. He says that Integral humanism represents the Indian culture. He has presented thoughts on 'Integral Economics' through the idea of Integral humanism.

Integral humanism means a human life in which :

(1) A human being is not merely thought of only as an 'economic human being', but as a composite of all characteristics of a human being.

(2) It is an ideology which considers that the mutual relationship of one human being with another and with the world accounts to make human life happy and prosperous.

According to Pandit Deendayal, Integral humanism can be achieved by :

(1) Serving the ill informed/ignorant and deprived people of the society.

(2) Making them self sufficient by providing technical education and by skill formation.

(3) Enabling them to increase their income and by providing them better housing.

For this he chose some successful policies from the west which would also be suitable for the nature of Indian economy and which would help in the overall development of the country.

11.6.3 An Insight into what is Attainable and the use of Resources : Pandit Deendayal opined that India answered various problems of public life from a nationalist perspective. While after independence we adopted an economic perspective. According to him, the reason for this

is that the society has lost the insights into the difference between what is attainable and the factors which help to attain the attainable. Unless the society is able to decide the goals of human life and deliberate on the place of wealth in human life, we will not be able to choose the factors which will help us to attain the goals of human life. Hence economic development must be viewed only as part of the overall development of human life. The ultimate goal of human life is happiness for which human beings try to accumulate wealth which cannot be earned without human efforts (labour). Hence a society can never develop, if labour is rendered unemployed. Production processes must be created keeping this fact into consideration and the prime goal of our monetary policy and other economic policies should be overall development of human beings. He firmly held such views.

11.6.4 Ownership of Assets : In the use of wealth, it is important to consider the aspect of ownership. In a capitalist system, there is private ownership of wealth (property / assets) without state control. A socialist system on the other hand is based on the premise that private property is the cause of all economic problems and hence private property has no place in socialism. While Pandit Deendayal also states that abolition of private ownership completely is unwise. Because that would mean loss of incentive and willingness to work, loss of dignity of an enterprising person, loss of safety in some manner and hence reduction in satisfaction. Therefore, while people must be allowed to own private wealth, limits must be set on holding of property and such limits must be determined on the basis of human values. The limit on private property holding should be determined in a such a manner that the possession or deprivation of private property do not become the cause of devastation for a human being. He believed that uncontrolled possession and self willed use of property destroys the ethical and intellectual character of a society. Thus he suggested setting up of law, social governance and absolute decentralization of power in setting such limits. He believed that the use of assets and wealth should be done for the development of human beings.

11.6.5 Decentralized Economy : Centralization of authority and assets which exists in both capitalism and socialism hinders the overall human development. So Pandit Deendayal suggested a decentralized economic set up which promotes overall development and increases interaction among people. Decentralization of power can be attained by entrusting decisions regarding production, distribution and consumption to people. The producer will only check distribution in order to prevent wasteful consumption thus ensuring that resources are saved for furthering investment and production. He believed that decentralization of economic power can help in solving the major problems of Indian economy. He has emphasized on the development of cottage industries and small industries.

11.6.6 Restricting Consumption : Pandit Deendayal states, “to satisfy unlimited wants the society invents new methods and factors and such methods on the other hand create newer problems and also create the risk of destroying human values. So our economic goal should be to limit consumption. Keeping in mind the development of the nation, consumption and production limits should be decided and maintained.” He proposed to make the country self-reliant by adopting the policy of limiting consumption.

Even developed capitalist nations are influenced by the idea of limiting consumption put forward by Pandit Deendayal. Even these nations face problems related to insufficient raw materials, increasing crude prices, inflation, race for armament and product quality as well as increasing stress and environmental issues. Even these countries are working towards applying the concept of limited consumption to resolve certain issues.

The standard of living of many in India is low and Pandit Deendayal believed that there should be no argument regarding raising the standard of living of people. But to do that production has to be increased and appropriate distribution must take place. According to Pandit Deendayal appropriate amount of production and appropriate distribution can be made possible only by limiting consumption. He states that the requirements should be held within limit of one's income.

11.6.7 Labor Intensive Methods of Production : Considering the labour abundance and scarcity of capital in India, Pandit Deendayal proposed labour intensive methods of production for India. Adaption of capital intensive methods of production would mean spending the scarce capital resources in paying for buying capital technology from foreign nations; besides, capital intensive methods will employ less labour leading to unemployment. He further suggested reducing burden of population on land by setting up small industries which use simple machines. Hence he asserted that the motto of planning should be 'work for all' and plans must promote labour intensive methods which raise employment.

11.7 Objectives of Indian Economy According to Pandit Deendayal Upadhyay

Capitalism and Socialism have failed in comprehending human beings and their problems; hence according to Pandit Deendayal, India needs neither capitalism nor Socialism but India needs 'progress and happiness of her people'. In this regard, he stated the following objectives which Indian economy should pursue:

(A) A minimum standard of living must be ensured to all.

(B) Security of the nation must be an important goal.

(C) Gradual progress should be made in such a way that such new methods are devised that help India contribute in development of the world in her own manner.

(D) In order to attain goal of development, all young and able people should get the opportunity to work.

(E) Natural resources must be used prudently.

(F) Production processes must be adopted and devised keeping into consideration the availability of factors of production.

(G) Human beings must not be neglected in economic planning; rather economic planning must take into consideration the social, cultural and other values of human life.

(H) Decisions pertaining to ownership in various sectors; of state or private individual or of other organizations must be made by adopting a practical approach.

Pandit Deendayal Upadhyay also contributed by way of his ideas for development agriculture, industry, marketing, rural economics and 'concept of Swadeshi'. Many states have implemented schemes based on his ideology. Based on his theory of importance of labor and employment to everyone 'Shramave Jayate' plan was introduced in india on 16 October 2014. 'Gram Jyoti Yojana' was implemented for the development of agro and rural industries.

Even today, solutions to economic problems can be found in Pandit Deendayal's economic thoughts.

Exercise

1. Choose correct option for the following from the options provided :

- (1) During the great depression, economic thoughts on expenditure, income and employment were given by :
(A) Prof. Adam Smith (B) Prof. Marshall (C) Prof. Keynes (D) Prof. Robbins
- (2) Which is the leading work on Economics in India ?
(A) Manusmruti (B) Kautilya's Arthshashtra
(C) Shukra-niti (D) Ramayan
- (3) How many sources of income of the state did Kautilya show ?
(A) 7 (B) 5 (C) 9 (D) 8
- (4) Who is the author of the book "Unto the last" ?
(A) Thoreau (B) Ruskin (C) Tolstoy (D) Gandhiji
- (5) Who gave the theory of Trusteeship ?
(A) Kautilya (B) Pandit Deendayal (C) Gandhiji (D) Keynes
- (6) Which was the theory given by Pandit Deendayal with reference to Labour Oriented Production method ?
(A) Work for everyone (B) Food for everyone
(C) Rest for everyone (D) House for everyone
- (7) Who was the patron of 'Integral Humanism' ?
(A) Gandhiji (B) Pandit Deendayal (C) Kautilya (D) Prof. Marshall

2. Answer the following questions in one sentence :

- (1) Which Indian literature refers to the thoughts related to Economics ?
- (2) Who compiled and published the whole 'Kautilya's Arthshashtra' ? And when ?
- (3) Define : 'Arthshashtra' according to Kautilya.
- (4) Define : External charges according to Kautilya.
- (5) Which thoughts of Thoreau did Gandhiji implement ?
- (6) Define : Gandhiji's ideas on Sarvodaya.
- (7) Which is the third option suggested by Pandit Deendayal as a solution to the economic problems in India ?
- (8) According to Pandit Deendayal, which method is more applicable for production in India.

3. Answer the following questions in short :

- (1) The king should take care of which factors during the establishment of statehood ?
- (2) According to Kautilya, how should a city be developed ?
- (3) Explain : There is nothing like 'Gandhism'.
- (4) Briefly introduce : Pandit Deendayal.

4. Answer the following questions in brief points :

- (1) Which factors should be kept in mind while establishing the statehood ?
- (2) Explain : Gandhiji was an advocate for simplicity and non-possessiveness.
- (3) Explain : According to Pandit Deendayal limited consumptions the solution to major economic problems.
- (4) Describe : The opinion of Pandit Deendayal related to 'Ownership of assets'.

5. Answer the following questions in detail :

- (1) Explain Kautilya's thoughts on State treasury and Taxation policy.
- (2) Explain Kautilya's thoughts on Agriculture and Animal Husbandry.
- (3) Explain Gandhiji's thoughts related to use of machinery.
- (4) Explain the Theory of Trusteeship given by Gandhiji.
- (5) Describe the objectives suggested by Pandit Deendayal for Indian economy.

Glossary

Production	: Output created at a particular time with the help of given factors of production and available resources is called production.
State Treasury	: State Treasury means the financial resources of a state. A state collects funds for development functions, welfare functions, defence, creating employment, creating infrastructure and so on.
Land Revenue	: The tax collected by the state from farmers on land holding is called land revenue.
Sarvodaya	: The upliftment of all is called 'Sarvodaya'. Gandhiji envisioned a society which uplifts the deprived, poor and marginalized people and this idea was called 'Sarvodaya'.
Idea of Trusteeship	: A doctrine proposed by Gandhiji where the owner and heir of abundant wealth voluntarily creates a trust of the excess wealth for benefit of the society and acts as a trustee while owning the wealth is called trusteeship.

- Capital Intensive Technique of Production** : A technique which uses capital as a predominant factor in production process while minimizing the use of labour is called capital intensive technique of production.
- Labour Intensive Technique of Production** : A technique which uses labour as a predominant factor in production process while minimizing the use of capital is called labour intensive technique of production.
- Dignity of Labour** : It is a value associated with social planning where all able human beings must be provided opportunity to work and must get respectable wages.
- State** : A system established by the king for administration of the kingdom. In modern times it is a system governed by a body of representatives.
- Non-Possession** : The idea which revolves around the human value of not holding excess goods/wealth/resources etc. than what is necessary to satisfy one's wants.
- Antyodaya** : A word used by Gandhiji for upliftment of human beings in the lowest strata of social and economic development.
- Consumption** : Process of using goods and services for satisfaction of wants.



List of Activities which Students may be Made to Perform

1. Draw attention to news pertaining to economic events, collect such reports and articles and make students read in the class.
2. Make charts giving introduction of well known economists with their photos.
3. Make charts giving introduction of Nobel Laureate economists with their photos.
4. Make charts showing the currencies of various countries.
5. Learn to understand and use Economic Survey of India.
6. Direct students to use reliable sources of information pertaining to economics from internet.
7. Make a list of industrialists who have made significant contribution in India's development.

List of Graphs and Diagrams/Figures

- 1.1 Representation of Information in Diagram
- 1.1 Representation of Data in Diagram
- 1.2 Representation of Data in a Bar Graph
- 1.3 Representation of Data in a Grouped/Clustered Bar Graph
- 1.4 Representation of Numerical Data in a Pie Diagram
- 3.1 Diagram for Law of Demand.
- 3.2 Expansion and Contraction of Demand
- 3.3 Increase and Decrease in Demand
- 3.4 Individual Demand Curves and Market Demand Curve
- 3.5 Perfectly Elastic Demand
- 3.6 Perfectly Inelastic Demand
- 3.7 Unitary Elastic Demand
- 3.8 Relatively Elastic Demand
- 3.9 Relatively Inelastic Demand
- 4.1 Diagrams for Individual and Market Supply Curves
- 4.2 Diagram of Law of Supply
- 4.3 Expansion and Contraction of Supply
- 4.4 Increase and Decrease of Supply
- 4.5 Diagram of Price Determination
- 5.1 Diagram of Total Fixed Cost
- 5.2 Diagram of Total Variable Cost
- 5.3 Diagram of Total Cost
- 5.4 Diagram of Average Fixed Cost

- 5.5 Diagram of Average Variable Cost
- 5.6 Diagram of Average Total Cost (ATC/AC)
- 5.7 Diagram of Marginal Cost
- 5.8 Diagram of Relationship between Average Cost and Marginal Cost
- 5.9 Revenue Curve in Perfectly Competitive Market
- 5.10 Revenue Curve under Imperfect Competition
- 6.1 Kinked Demand Curve
- 9.1 Circular Flow of National Income in a Closed Economy
 - Budget of Central Government in India
 - Budget of the State Governments in India
 - Budget of a Municipal Corporation

