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BBA HONOURS

SEMESTER 2

ECONOMICS

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Module	Unit	Content	Hrs (60)	Internal (30)	External (60)
I		**Business, Economics and Markets**	12	20	16
	1	Business Environment: Meaning, Nature, Importance			
	2	Business Economics: Meaning, Nature, Importance			
	3	Business Organisations: Nature and Types of firms, Internal Organization of the firm Structure of Industry, Structure - Conduct - Performance Paradigm			
	4	Economics and World of Business: Problem of Scarcity, Demand and Supply			
	5	Macroeconomic and Microeconomic Environment, Choices: Choice, Opportunity, Rational Choice			
	6	The Working of Competitive Markets: Business in a Competitive Market			
	7	Price Mechanism Demand and Supply - Determinants, Schedules, Curves, Movements and Changes, and Laws			
	8	Price and Output Determination - Equilibrium and New Equilibrium			
II		**Background to Demand and Supply**	12		18
	7	Demand and the Consumer: Characteristics and Approaches to Analysing Consumer Demand			
	8	Marginal Utility Theory, Demand Under Risk and Uncertainty			
	9	Demand and the Firm: Estimating Demand Functions, Forecasting Demand			
	10	Cost and Production: Nature, Meaning and Types of Cost			
	11	Production in the Short run and Long-run, Cost in the Short run and Long run			
	12	Revenue: Meaning, Nature, Types and its Curves, Calculation of Types of Revenue			
	13	Relationship of Price and Revenue Profit maximization			
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	15	Profit Maximization under Perfect Competition and Monopoly: The Short-run and Long-run equilibrium of the firm			
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	18	Game Theory -Single - move games, Multiple - move games			
IV		**Business in the Factor Market**	12		18
	19	Labour Markets, Wages. And Industrial Relations: Market - determined wage rates and employment			

	20	Power in the Labour Market. Low Pay and Discrimination			
	21	Investment and the employment capital: The Pricing of Capital Services, the demand for the supply of capital services			
	22	Reasons for Government intervention in the markets: Markets and the role of government			
	23	Government Intervention in Market, Firm and Social Responsibility			
	24	Liberalization, Privatization, and Globalization: Indian Economy before and after LPG			
	25	Macroeconomics Policies: Fiscal Policy, Monetary Policy			
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V	**Open Ended Module**		**12**	**10**	
		1. Case Study Analysis			
		2. Economic Data Analysis Project: Student select a set of economic indicators (eg. GDP, Inflation rates, unemployment rates) and analyse their impact on a specific industry or business sector over time. They present their findings through charts, graphs, and a report that discusses how these indicators affect business decision			
		3. Cost Benefit Analysis for Community Project: Students propose a community project (eg. A local park renovation, a recycling programme) and conduct a cost benefit analysis to evaluate its feasibility and potential impact. They must consider various cost, benefits, and stakeholders in their analysis			

CHAPTER 1

BUSINESS, ECONOMICS AND MARKETS

Businesses get resources from the environment. They transform these resources into goods and services. Then they send these goods and services back into the environment. Thus, there is a continuous interaction between businesses and the environment. For everything, businesses depend on the environment. In other words, environment influences the businesses and the environment is influenced by the businesses. Hence, it is essential to study about the environment.

Meaning of Environment

The word 'environment' is derived from the French word 'environ'. It means 'surround". Thus, the term environment simply refers to surroundings. It includes all that surround us. It includes everything that surrounds the earth. Every man is surrounded by many things like air, water, soil, stones, animals, plants, other men etc. All these surroundings constitute the environment. Einstein has rightly defined environment as "everything that is not me". Thus, environment refers to the surroundings in which we are living.

Business Environment

An organization operates within a broad environment. In other words, environment surrounds an organisation. An organisation constantly interacts with its environment. In the words of H.I. As off, "The firm is a creature of its environment. Its resources, its income, its problems, its opportunities and its very survival are generated and conditioned by the environment".

Meaning of Business Environment

It is rightly said that business is the product of environment. The political system, economic system, social system, government policies etc. all influence the conduct of business in one way or the other. Thus, business is a system that is made up of all environmental factors.

Business environment simply refers to forces that are external to the business enterprise. It refers to those surroundings of business enterprise, which affect its operation and determine its success.

According to Keith Davis, "Business environment is the aggregate of all conditions, events and influences that surround and affect it."

Thus, business environment is a climate in which the business operations are carried out. In short, business environment refers to the surroundings in which businesses operate.

Nature of Business Environment

Business environment includes everything that affects the company's operations, decisions, and performance. Business environment has the following characteristics:

1. Dynamic: The business environment is always changing. Technology, customer preferences, economic conditions, and government rules are changing.

2. Complex: The business environment is made up of many different factors. These factors are very complex.

3. Unpredictable: It is difficult to predict what will happen in the business environment. Unexpected events like natural disasters, political changes, or sudden economic shifts, may greatly affect a business.

4. Global: In today's world, businesses are not limited to their own country. The business environment is affected by global factors like international trade, global competition, and global markets.

5. Competitive: Most businesses operate in competitive environments. There are always other companies offering similar products or services.

6. Legal and regulatory factors: Businesses must follow laws and regulations set by governments. These rules relate to taxes, employee rights, environmental protection and more. Changes in these laws affect a company's operations.

7. Cultural and social factors: The values, beliefs, and social norms of the community also affect business decisions.

8. Technological advances: Technology plays a huge role in shaping the business environment. New technology can create opportunities for businesses to innovate improve efficiency, and reach more customers.

9. Economic factors: The overall economic conditions (like inflation, unemployment rates, or interest rates) affect the way businesses operate.

Importance of Business Environment

Business environment is extremely important because it affects every part of how business operates. Following are the reasons why business environment is important:

1. Helps Businesses Plan and Make Decisions: A clear understanding of the business environment helps companies plan for the future. When businesses know what's happening in the economy, society, and technology, they can make better decisions.

2. Identifies Opportunities: By keeping an eye on the business environment, companies can spot opportunities for growth.

3. Helps Businesses Stay Competitive: The business environment is full of competitors. To stay ahead, businesses need to understand what other companies are doing and how the market is changing. Study of environment helps a business in this regard.

4. Adapts to Changes: The business environment is always changing. New rules, regulation, and laws come. Customers' trends change. Economic conditions change. Hence, business must adapt to these changes to survive.

5. Minimizes Risks: The business environment is full of risks, like changes in laws, economic downturns, or new competitors entering the market. Understanding these risks helps businesses take steps to avoid or reduce the damage.

6. Improves Customer Satisfaction: Businesses that understand their customers' needs and preferences can create products or services that meet those needs. As a result, customer satisfaction improves.

7. Informs Marketing and Advertising: Understanding the business environment is essential for effective marketing.

8. Encourages Innovation: The business environment inspires new ideas and innovations. It also encourages businesses to adopt new technologies or production methods to improve efficiency.

9. Promotes Sustainable Growth: A good understanding of the business environment helps businesses grow in a way that lasts long. For example, if a business understands the importance of sustainability, it can implement eco-friendly practices that ensure its success in the long run, without harming the environment or society.

In short, the business environment is crucial because it shapes every decision a business

Business Economics

The basic function of management of a business unit is to achieve the objectives of the organisation. To achieve the objectives, management has to take so many decisions on different business problems. Many of the decisions are taken under the conditions of uncertainty. Therefore, decisions involve risk. Hence, the process of decision making becomes more complex in the everchanging environmental conditions. In order to help business executives to solve their business and managerial problems, a new branch of economics had been developed in 1951. This new branch of economics is known as Managerial Economics or Business Economics.

Meaning and Definition of Managerial Economics or Business Economics

Managerial economics was first introduced by Joel Dean. He is considered to be the father of managerial economics. According to him, "Managerial economics is the use of economic

analysis in the formulation of business policies". Managerial economics is popularly known as business economics.

Business economics is the application of the economic theories and analytical tools in managerial decision making. It is a study of allocation of scarce resources available to a firm among various business activities like production, marketing etc.

According to Spencer and Siegelman, "Managerial economics is the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by management".

According to Domenick Salvatore, "Managerial economics refers to the application of economic theories and tools of analysis of decision science to examine how an organisation achieves its aims or objectives most efficiently".

Thus, business economics is concerned with the application of economic theories to business management. It is the application of economic concepts and theories in the process of managerial decision making. It is a study of how to manage the limited resources to achieve the objectives of business. Thus, it is the economics for business decision-making. In short, business economics is the economics for management and businesses. Business economics is also known as economics of firm, applied economics etc.

To conclude, management is about making choices. Economics is the study of decision making. Thus, managerial economics or business economics helps the manager in taking the correct decisions.

Nature (Characteristics) of Managerial Economics

The following characteristics of managerial economics will indicate its nature:

1. Micro economics: Managerial economics is micro economic in character. This is so because it studies the problems of a particular business unit.

2. Normative science: Managerial economics is a normative science. It seeks what is good and what is bad. It is concerned with what management should do under particular circumstances. It determines the goals of the enterprise. Then it develops the ways to achieve these goals.

3.Pragmatic: Managerial economics is pragmatic. It concentrates on making economic theory more application oriented. It tries to solve the managerial problems in their day-to-day functioning of business enterprises.

4. Prescriptive: Managerial economics is prescriptive rather than descriptive. It prescribes solutions to various business problems.

5. Uses macro economics: Marco economics is also useful to managerial economics. Macro-economics provides an intelligent understanding of the environment in which the business

operates. Managerial economics takes the help of macro-economics to understand the external conditions such as business cycle, national income, economic policies of Government etc.

6. Uses theory of firm: Managerial economics largely uses the body of economic concepts and principles towards solving the business problems.

7. Management oriented: The main aim of managerial economics is to help the management in taking correct decisions and preparing plans and policies for future.

8. Multi disciplinary: Managerial economics makes use of most modern tools of mathematics, statistics and operation research. In decision making and forward planning, the principles of accounting, finance, marketing, production, personnel etc. are used.

9. Art and science: Managerial economics is both a science and an art. As a science, it establishes relationship between cause and effect by collecting, classifying and analysing the facts on the basis of certain principles. Managerial economics is an art also. It is the study of the art of decision-making in firm.

Importance of Business or Managerial Economics

The main objective of any business is to earn maximum profit. For achieving this objective, an organisation needs to ensure the effectiveness of its decision-making process. Business economics enables managers in effective decision making.

Business economics is both light giving and fruit bearing science. It enriches our knowledge (light) and brings results (fruits). The uses of business economics are outlined as below:

(i) It provides tools and techniques for managerial decisions.

(ii) It gives answers to the basic problems of business management.

(iii) It helps in estimating various economic variables.

(iv) It provides tools for demand forecasting and profit planning.

(v) It helps in the formulation of business policies.

(vi) It helps in deciding optimum quantities of output, cost, price and profit

(vii) It offers a wide range of business strategies. These strategies help managers solve various business problems.

(viii) it is the foundation of business policies, Business policies are formulated on the basis of tools and techniques of managerial economics.

(ix) It assists the management to identify and understand both external and internal Ty factors that influence the business.

Thus, managerial economics offers a number of benefits to business managers. It is also useful to individuals, society and government. It can help to develop strategies to replace poverty with prosperity, and to replace waste with efficiency.

Business Organisations

People form organisations to carry out business activities. They bring together resources or factors of production. They convert these resources into goods and services. Then they distribute these goods and services to those people who need them. They undertake all these activities with a view to earn profit. Only one person may undertake all these activities. Sometimes two or more persons together carry out business activities. Sometimes several people come together to carry on business activities. When people organise themselves to undertake business activities, a business organisation comes into existence.

Meaning of Business Organisation

A business organisation is simply called a firm. A firm or business organization is a group of people working together to produce goods or services to make money. Businesses vary in size, ownership, and structure, Thus, a firm or business organisation is an economic unit engaged in the production or distribution or both of goods and services for earning profits. In short, firms or business organisations are profit organisations.

Nature of Firms or Business Organisations

The nature of firms or business organisations can be understood from their characteristics or features. Main characteristics or features include the following:

1. Profit motive: The main reason for starting a business is to earn money.

2. Risk: Business owners face the possibility of loss if things don't go as planned. That is, a business involves several risks.

3. Ownership and management: Business owners may manage their organisations themselves or hire managers to do so.

4. Resources: Business organisations require resources such as money, raw materials, and labour to function.

5. Production and distribution: A firm undertakes production or distribution or both of goods and services. It operates in various sectors such as manufacturing, retail, or services

Types of Business Organisations or Firms

There are different types of organisations. In other words, firms or business organisations are classified in several ways. Here we give only two bases of classification: (a) classification on the basis of type of business, and (b) classification on the basis of ownership

A. Classification on the basis of Type of Business

On the basis of type of business, firms or businesses are classified into three as below:

1. Service Business: A service type business provides intangible products. They offer skills, labour, expertise, and other similar work in return for a fee.

2. Merchandising Business: This type of business buys products at wholesale price and sells the same at retail price. They are known as "buy and sell" or "reseller" businesses.

3. Manufacturing Business: These firms buy raw materials to produce products. The goods produced are then sold to customers.

B. Classification on the basis of Ownership

On the basis of ownership, firms or business organisations are classified as below:

1. Sole Proprietorship: This is the simplest and oldest form of business. In sole proprietorship, one person owns and manages the business. He takes all decisions. He takes all the risks involved in business. The entire profit belongs to him. The liability of the sole proprietor is unlimited. This means, if the business fails, the owner is personally responsible for the debts. Small shop is an example

2. Partnership Organisations: A partnership involves two or more people. They share ownership of a business. The owners are called partners. It is formed on the basis of an agreement between persons who form the partnership. Profits are shared among the partners. The liability of the partners is unlimited. Law firms, accounting firms etc., are examples.

3. Joint Stock Company: It is an association of individuals. They contribute capital to run a business. It is registered under the law. Thus, a company is an artificial person created by law. It has a long life. IT has a legal entity separate from its members. It has a distinctive name. An important feature is that the liability of the members is limited. This means their liability is limited to the extent of the value of shares held by them (investment). This further means that the members are not personally liable for the debts of the company. Large companies like Apple, Coca-Cola, Amazon etc., are examples.

4. Limited Liability Partnership (LLP): It is a hybrid form of business. Here owners (partners) have limited liability. This means they are not personally responsible for the business's debts.

5. Co-operative Organisation: A co-operative organisation is a business owned and operated by a group of people who share a common goal or interest, such as farmers or consumers. Its main aim is not to maximise profit but to serve the needs of members. Grocery co-operatives, farmers' co-operatives etc., are examples.

Internal Organisation of the Firm

After deciding the type of business firm to be started, then it is necessary to determine the internal organisation of the firm.

Meaning of Internal Organisation of a Firm

The internal organization of a firm refers to how a business is set up internally to achieve its goals and manage its daily activities. It defines how the company's resources, such as people, money, and equipment are organized and managed. This helps the firm to operate efficiently and meet customer needs. Let's examine how the internal organization is typically structured:

1. Management Levels: Firm's management is divided into different layers or levels.

Important levels are:

a) Top Management: This includes the highest-level leaders, like the CEO (Chief Executive Officer) and directors. They make important decisions about the firm's direction and strategy.

b) Middle Management: These managers implement the strategies decided by top management. They are responsible for specific departments, such as marketing, finance, or operations.

c) Lower Management: These are the supervisors or team leaders who handle day-to-day operations and guide workers.

2. Departments: A firm is usually divided into departments or teams. Each department or team focuses on a specific area of the business. Following are the important departments of a firm:

a) Sales: It is responsible for selling the firm's products or services.

b) Marketing: It focuses on advertising and promoting products to customers.

c) Finance: It manages the company's money, including budgets, investments, and financial records.

d) Operations: It looks after the production or delivery of goods and services.

e) Human Resources (HR): It handles hiring, training, and managing employees.

3. Roles and Responsibilities: Every employee within the different departments has a specific role. Some people may oversee a team, while others may be responsible for specific tasks like managing finances or developing new products. A clear structure helps everyone understand their duties. Moreover, the employees can work together effectively.

Structure of Industries

A structure is something that consists of parts connected together in an orderly manner. An industry is a group of businesses that produce similar goods or services.

Meaning of Structure of Industry

The structure of an industry refers to how the businesses within it are organized and how they compete with each other.

Components of Structure of Industry

Following are the important components of structure of industry:

1. Competitors: The intensity of competition from existing competitors will depend on several factors. Important factors include: (1) The number of competitors, (2) Their relative size, (3) Whether their product offering and strategies are similar, (4) The existence of high fixed costs, (5) The commitment of competitors, and (6) The size and nature of exit barriers

2. Potential competitors: Potential competitors are those who might have an interest in entering an industry. The entry of potential competitors depends largely upon the size and nature of barriers to entry.

3. Product differentiation: Established firms may have high levels of customer loyalty caused by brand name and image, advertising, and customer service.

4. Substitute products: Substitute products or services limit an industry's profitability and growth by putting a ceiling on pricing.

5. Customer power: When customers have relatively more power than sellers, they can force prices down or demand more services, thereby affecting profitability.

6. Supplier power: If suppliers have more power, they can influence prices to get more profit

7. Rivalry among existing competitions: If intense rivalry exists between firms, they will compete on the basis of price. This will destroy industry value by pushing down profit margin.

Structure-Conduct-Performance (SCP) Paradigm

The Structure-Conduct-Performance (SCP) Paradigm is a framework used to understand how industries work and how companies behave within those industries. It looks at three

main factors: structure, conduct, and performance. These three elements are connect This means that the structure of an in industry affects how companies behave (conduo and how companies behave affects their overall performance. Let's examine each these three elements separately:

1. Structure

The structure of an industry refers to how it is organized. This includes the numbery, firms in the market, how big they are, and how easy or difficult it is for new firms to enter the market.

Examples:

i) Number of firms: Are there many small firms, or a few large ones? For example, the mobile phone industry has a few large firms like Apple and Samsung. Why local farmers might be many smaller firms.

ii) Market concentration: Is the market controlled by just a few firms, or is it mo spread out? This tells you how much control individual firms can have over price

iii) Barriers to entry: How hard is it for new firms to start and compete in the industry For example, it is hard to enter the airline industry because of high costs any regulations, but starting a small coffee shop is easier.

2. Conduct

Conduct refers to the behaviour or actions of the firms within the industry. It include how companies make decisions, how they compete, and the strategies they use attract customers or gain market share.

Examples:

i) Pricing: Do companies set prices independently, or do they co-operate (e.g., through price-fixing or collusion)?

ii) Advertising and marketing: How do companies try to attract customers? For example do they advertise a lot or focus on word-of-mouth?

iii) Product differentiation: How much do companies try to make their products unique so that they can stay ahead of competitors?

3. Performance

Performance is about how well the industry and its companies are doing. This include how profitable companies are, how much innovation is happening, how efficient they are, and how much value they're providing to customers.

Examples:

i) Profitability: Are the firms making a lot of money, or are they struggling to survive

ii) Innovation: Are companies developing new products or improving existing ones?

iii) Customer satisfaction: Are customers happy with the products or services getting value for their money?

iv) Efficiency: How well do companies use resources (money, labour, etc.) to produce their goods or services?

How They Are Connected

The SCP Paradigm suggests that the structure of an industry directly affects the conduct of businesses. This in turn affects their performance,

Example 1: In an industry with only a few large firms or companies (a concentrated market structure), those companies may act in ways that reduce competition (like agreement on prices). This leads to higher prices and less innovation. This affects their performance negatively.

Example 2: In a market with many competitors (a more competitive structure), businesses may have to innovate and offer better products at lower prices to survive. This can lead to improved performance, such as better products and services for consumers.

Importance of Structure-Conduct-Performance Paradigm

The Structure-Conduct-Performance Paradigm helps us understand how the makeup of an industry (structure) influences how companies behave (conduct), and how those behaviours affect their success and the overall market outcomes (performance). If an industry is highly concentrated with just a few big companies, it might lead to less competition and higher prices. This will affect both the company's profits and consumer welfare in the long run. On the other hand, a competitive market with many firms tends to encourage better services and lower prices. This will benefit consumers.

Economics and the World of Business

Economics is the study of how people make choices about using limited resources, such as money, time, and materials, to meet their needs and desires. It looks at how goods and services are produced, exchanged, and consumed. Economics helps us understand how things work in the world, from personal decisions about spending money to big decisions made by governments or businesses. Collins English Dictionary defines economics as: "The study of the way in which money, industry, and trade are organised in society."

The world of business is where companies and organizations operate to produce and sell goods or services. Businesses play a key role in the economy by creating jobs, driving innovation, and meeting the needs of consumers. They range from small startups to large corporations, all working to earn a profit. Understanding economics helps businesses make smart decisions about pricing, production, and growth. It also helps consumers make informed choices in the marketplace. In short, economics guides how businesses function.

Importance of Economics in the World of Business

As the great economist Lord Keynes said, "The ideas of economists and politics philosophers, both when they are right and when they are wrong, are more powerful the is commonly understood."

At its core, economics is the study of how resources are allocated, how people ant companies make choices, and how markets operate. This understanding is vital businesses. The importance of economics in the business world may be understood from the following points:

1. Making smart decisions: Economics helps businesses decide how to use their limited resources (like money, time, and labor) effectively.

2. Understanding demand and supply: One of the most important concepts in economic is supply and demand. Businesses need to understand how much of a product people want (demand) and how much is available (supply). This knowledge helps them set the right prices, decide how much to produce, and ensure they don't waste resources.

3. Market trends: Economics allows businesses to spot trends in the market, such as changes in consumer behaviour or the effects of new technologies.

4. Cost management: Economics helps businesses analyse costs and find ways to reduce them. Businesses that understand the cost of production, wages, raw materials, and other factors can optimize their spending.

5. Risk management: Every business faces risks. Economics helps businesses anticipate these risks and plan accordingly.

6. Understanding government policies: Economic policies such as taxes, tariffs, minimum wage laws directly impact businesses. A good understanding of economics helps business owners and managers stay aware of how such policies might affect their operations, costs, and profits.

7. International Business: In today's global economy, businesses often deal with international markets. Economics helps businesses understand currency exchange rates, trade policies, and the global supply chain.

Problem of Scarcity, Demand and Supply

Economics is about making choice under the condition of scarcity. Economics teacher us how the limited resources are utilised to satisfy the unlimited wants. In short, economics is a science of scarcity as well as a science of choice.

Scarcity

In everyday life, we all face choices about how to spend our time and money because there is never enough of these resources to meet all our wants and needs. This is what economists call scarcity. Scarcity is the basic problem of having limited resources (like money, time, or raw materials) but unlimited wants (we always want more goods and services). Because of scarcity, we must make decisions about how to use our resources wisely, choosing what to buy, what to produce, and what to give up.

Scarcity means that resources are limited. For example, there is only so much land, labor, and money available to create products or provide services. Even though people have endless wants (new gadgets, vacations, more clothes), we can't have everything. This forces individuals, businesses, and governments to make choices about what to produce and what not to produce. Scarcity is a problem faced by everyone, from individuals deciding how to spend their money to companies deciding how to produce their products.

Relationship Among Scarcity, Demand, and Supply

There is a strong relationship among scarcity, demand, and supply. Scarcity drives the concepts of demand and supply. Resources are limited. Hence, only certain amounts of goods and services can be produced and offered. This scarcity affects the supply. If something is rare, there might not be enough to meet everyone's needs.

Demand affects how much people are willing to pay for a product. When demand is high, people are willing to pay more. This might encourage suppliers to produce more. If the product is scarce, people will often pay higher prices to get it. Supply influences how much of a product is available. If there is a limited supply and high demand, prices will tend to rise. On the other hand, if there is a lot of supply and less demand, prices may fall.

In short, scarcity creates a situation where there is limited supply, and demand reflects how much people want the product. The balance between supply and demand helps. determine the price of goods and services. When something is scarce and in high demand, prices go up; when something is abundant and in low demand, prices go down.

Note: Demand and supply will be discussed in detail later.

Macroeconomic and Microeconomic Environment

Economic environment may be broadly classified into two, namely, macroenomic environment and microeconomic environment.

Macroeconomic Environment

The macroeconomic environment refers to the larger economic factors that influence a country's overall economy. It looks at the bigger picture, including national or global trends and policies. In simple terms, it is about how the entire economy works and what happens

to people in general, businesses, and governments. Important elements of the macroeconomic environment may be briefly explained as below:

(a) GDP (Gross Domestic Product): This is the total value of goods and services produced in a country. If the GDP is rising, it usually means the economy is growing.

(b) Inflation: Inflation is the rate at which prices for goods and services increase. A moderate level of inflation can signal economic growth, but too much inflation Cho make things more expensive for everyone.

(c) Unemployment: Unemployment means the number of people who are actively war for work but cannot find jobs. High unemployment can indicate an economy the struggling.

(d) Interest rates: interest Rates are set by the central bank. Interest rates borrowing and spending. When interest rates are low, people and business more likely to borrow and spend money.

(e) Government policies: These include taxation, government spending, and regulations that affect economic activity. For example, higher taxes or stricter regulations slow down economic growth, while lower taxes or stimulus spending can help economy grow.

Microeconomic Environment

The microeconomic environment looks at the smaller scale of economics. It refers the decisions and behaviours of individuals, households, and businesses. It focuses how specific factors affect smaller parts of the economy, like one person's purchasing decisions or a business's pricing strategies. Important elements of the microeconomic environment may be briefly explained as below:

(a) Supply and demand: This is the basic principle that prices are determined by much of a good or service is available (supply) and how much people want it (demand For example, if there is a shortage of something people want, its price will go

(b) Competition: Businesses compete with each other for customers. This competition can lead to better products, lower prices, or new services. For example, if one pho company lowers its prices, others might follow to keep customers.

(c) Consumer behaviour: This focuses on how people make decisions about what buy and how much they're willing to pay for it. For example, if people start prefer electric cars, car manufacturers may produce more of them.

(d) Production costs: Businesses decide how much of a product to produce based on cost of production. If production costs are too high, the price of goods of s shall rise.

Choice, Opportunity Cost, and Rational Choice

In economics, choice, opportunity cost, and rational choice are important concepts These concepts help us understand how people make decisions and manage their limited resources like time, money, and energy.

Choice

Choice emerges when limited resources are to be used for the satisfaction of unlimited wants. Thus, an individual cannot satisfy all of his/her wants. So he/she has to choose the most urgent wants from different wants. Choice is the process of selection from available alternatives Choice emerges because: (i) resources are scarce, and (ii) resources can be allocated to alternate uses (alternate means different). In short, choice arises due to scarcity. Scarcity and choice is the essence of economics. Both are inseparable (i.e., both go together). This is because the problem of choice arises due to scarcity of resources.

For example, if you have 200 and you're deciding whether to buy a book or go out to eat, you must make a choice between these two options. The idea is that, because resources (like money or time) are limited, you can't have both at the same time. So you must choose what's most important to you.

2. Opportunity Cost

Opportunity cost is the value of the next best alternative you give up when you make a choice. Every time you make a decision, you're choosing one thing and forgoing another. The opportunity cost is the thing you didn't choose but could have gotten if you made a different decision.

Going back to the example of the 200, if you choose to buy a book instead of going out to eat, the opportunity cost is the meal you didn't have. In simple terms, opportunity cost is what you lose when you make a choice.

It is important to remember that opportunity cost isn't just about money-it can also include time, convenience, or enjoyment. So, every decision you make has an opportunity cost, even if you don't always think about it directly.

3. Rational Choice

Rational choice is the idea that when people make decisions, they do so in such a way that will give them the most benefit or satisfaction. It assumes that people use logic and reasoning to make choices that help them achieve their goals.

Relationship Among Choice, Opportunity Cost, Rational Choice

There is a strong relationship among choice, opportunity cost, and rational choice is said so because they all play a role in how we make decisions and prioritize what i most valuable to us.

Choice is the act of deciding between different options. Every day, we make choices about how to spend our time, money, and energy.

Opportunity cost comes into play when we make a choice. It refers to what you give up or the value of the next best alternative that you don't choose. Opportunity cost reminds us that choosing one option means sacrificing the benefits of other options.

Rational choice is about making decisions that are well thought out and based logic. It is the idea that people make choices to maximize their satisfaction or benefit after considering all the alternatives and the opportunity costs. Rational persons don’t just pick the first option they sees. They carefully think about what each choice offers what they are giving up, and which option will provide the best outcome. So, when making a choice, a rational decision-maker thinks about the benefits and costs of all alternative before deciding.

To conclude, when we make choices, we need to consider opportunity cost-what we are giving up by not choosing the next best thing. The idea of rational choice is about making decisions that give us the most value before choosing. The relationship is the rational choices are made by understanding the opportunity costs and aiming to get the greatest benefit from our choices.

Working of Competitive Markets

There is competition everywhere. This is very true in the case of markets. In market firms compete with each other to sell as much output as possible. This means competition occurs when each party strives to pursue the same goal.

Meaning of Competitive Markets

A competitive market is a market structure where competition is at the highest possible level. A competitive market refers to a market characterized by intense competition in which no player has a dominant power. In a competitive market, there are many buyers and sellers. Hence, they individually cannot influence the price and output.

For example, if you have 200, and you're deciding between buying a book or going out to eat, a rational choice would mean choosing the option that gives you the most value or satisfaction based on your needs or want. If you value learning more than eating out, you might choose the book. If you're hungry and enjoy food more than reading, you might go for the meal

A rational choice doesn't necessarily mean it is the best or the smartest decision. But it reflects the idea that people try to maximize their benefit or happiness subject to their resources.

Characteristics of Competitive Market

Competitive markets have several characteristics. Some of them are:

1. There are many buyers and sellers in the market. The output of each seller is very small. From the supply side, each seller's market share is very low. From the demand side, buyers also have a relatively small market share.

2. Each buyer and seller are independent. Thus, they have no chance to collaborate and run unfair competition.

3. Sellers are free to enter and exit the market in response to profits in the market. Auvers also are free to enter and exist the market

4. The market is liquid. Competitive markets usually have high trading volumes.

5. Market price is determined by the forces of demand and supply.

6. Products are homogeneous. They are identical to each other.

7. Information is widely available.

8. There is no government interference

How Competitive Markets Work

A competitive market is a type of market where many sellers (businesses) and many buyers (consumers) are involved. No single seller or buyer has enough power to control the prices.

1. Many buyers and sellers: In a competitive market, there are many businesses selling the same or similar products. There are many consumers who are buying. No single seller can set the price too high. If he does so, buyers would simply choose another seller. Similarly, consumers have many choices. So no single buyer can push prices too low.

2. Prices determined by supply and demand: In a competitive market, the price of a product is decided by supply (how much of the product is available) and demand (how much people want to buy). When demand is high and supply is low, prices go up. When demand is low and supply is high, prices go down. The market adjusts itself so that the price reaches a balance where the quantity demanded equals the quantity supplied. This price is called the equilibrium price.

3. Competition drives quality and price: Since there are many sellers in a competitive market, each one has to offer good quality products at fair prices to attract customers. If a seller charges too much or doesn't provide good value, customers will go elsewhere. This

forces businesses to keep their prices reasonable and improve the quality of their products or services.

4. No barriers to entry: In a competitive market, it is easy for new businesses to enter and start selling their products, If a new business sees that there is demand for something and can offer it at a good price, they may join the market. This keeps the market fresh and ensures that competition remains high.

Advantages or Importance of Competitive Markets

Competitive markets are important for several reasons. The advantages of competitive markets are as follows:

1. It encourages innovation. As companies strive to be the best, they continue to innovate.

2. Quality and cheap products are more widely available.

3. Competitive markets benefit consumers. Due to weak market forces, each company offers prices according to quality

4. Competitive markets increase social surplus. And it is competition maximized under perfect competition

5. Firms succeed only when they use resources in the most effective manner.

Business in a Competitive Market

In a competitive market, businesses operate in an environment where there are many sellers offering similar products or services. Hence, no single business has enough power to control the price. In this kind of market, companies must work hard to attract customer stay efficient, and keep prices reasonable. Let's examine how businesses behave in a competitive market:

1. Focus on offering good value: In a competitive market, businesses cannot charge high prices. Since there are many other businesses offering similar products, customers can easily shop around and find the best deal. Therefore, businesses need to focus on offering good value. They must offer a combination of quality and price that meets customers' needs.

2. Keeping prices competitive: Since businesses don't have control over the price in a competitive market, they need to keep their prices in line with what other businesses are charging. If a business sets its prices too high, customers will go elsewhere to find cheaper options. On the other hand, if prices are set too low, businesses might not make enough money to cover their costs.

3. Improving quality and innovation: In a competitive market, businesses need to constantly improve to stay ahead of competitors. This means not only offering good products at competitive prices but also improving quality and innovating (introducing new ideas or

products). If a business can offer something better or different from others, it will attract more customers.

4. Marketing and advertising: To compete effectively, businesses need to make sure that customers know about their products and why they are worth buying. This is where marketing and advertising come into play. Businesses use advertising to highlight their products' features, benefits, and price advantages. They may use TV ads, online ads, or social media to reach potential customers.

5. Customer service: Good customer service is another important way businesses can stay ahead of competitors. If businesses treat their customers well, provide quick service, and resolve issues efficiently, customers are more likely to come back and recommend the business to others.

6. Adapting to changes: The competitive market is always changing. Hence, businesses must be flexible and ready to adapt. Firms have to adjust prices when costs go up. They should introduce new products to meet changing customer preferences. They have to respond to new competitors entering the market.

DEMAND

Goods are demanded because they have the capacity to satisfy human wants. But every want cannot be called a demand. Similarly, demand does not mean mere desire for commodity. Generally desire, want and demand are interchangeably used in day-to-day life. But in Economics all these terms have different meanings. Let us understand first two terms, namely, desire and want and then demand.

Desire: Desire means a mere wish to have a commodity. For example, a poor person has a desire to have a car. But he has just 500 in his pocket. This is just a wish.

Want: Want is that desire which is backed by the ability and willingness to satisfy it. Every desire is not a want. But a desire can become a want, if the person is in a position to satisfy It. A want is something that we desire and something that an individual does not possess yet.

Meaning of Demand

In economics, demand has a special meaning. Desire which is backed by willingness to pay and ability to pay is called demand in economics.

According to Prof. Hibdon, "Demand means the various quantities of goods that would be purchased per time period at different prices in a given market".

Thus, the demand for a commodity is its quantity which consumers are able and willing to buy at various prices during a given period of time. In short, demand is the behaviour of potential buyers in a market.

Law of Demand

Experience tells us that generally when the price of a commodity falls the quantity demanded increases and when its price increases its quantity demanded decreases. Thus there is an inverse (or negative) relationship between the price of a commodity and the quantity demanded. In economics, this relationship is known as the Law of Demand The law of demand states that at higher price lower quantity will be demanded and at lower price higher quantity will be demanded, other things remaining equal. The law of demand is known as the 'first law of market'. The law of demand was propounded by Marshall.

Demand Schedule

The law of demand can be explained with the help of a demand schedule. A demand schedule is a list of prices and corresponding quantities. It is the table or chart showing the quantities of a commodity demanded at different prices at a particular time particular market.

Types of Demand Schedule

Demand schedule may be of the following two types:

Individual demand schedule: Individual demand schedule refers to demand schedule of an individual consumer of a commodity in the market.

Market demand schedule: Market demand schedule shows the quantity demanded by all the consumers in the market at different prices. It is the sum total of all individual demand schedule

Following table shows the individual demand schedules of buyers A, B, C, D and E and the market demand schedule assuming that there are only 5 buyers of the commodities

Prices of Mango per dozen	Quantity demanded by individual buyers (Individual demand schedule) Demand Schedule)					Quantity demanded by all buyers (Market
	A	B	C	D	E	
5	5	6	5	6	8	30
10	4	5	4	5	6	24
15	3	4	3	4	5	19
20	2	3	2	3	4	14
25	1	2	1	2	2	8

Specimen of Individual and Market Demand Schedule

Demand Curve

The law of demand can be explained with the help of a demand Eurve also. When th Bloping demand schedule is shown graphically, it is called a demand curve. In short, demand ecurve is the graphical representation of demand schedule. The demand curve tells the Jandde demanded (dependent variable) is measured on X axis and the price (independent variable Pare relationship between price and quantity demanded of a commodity. The quantity is shown on the Y axis.

Types of Demand Curve

Demand curve can be of two types - Individual demand curve and market demand curve

Individual Demand Curve

Individual demand curve is the graphical representation of individual demand schedule. Let us construct an individual demand curve by taking the price and quantity demanded by buyer A (as in the demand schedule):

In the given diagram (Fig. 1.1) X-axis measures quantity of mangoes demanded and Y-axis measures the price per dozen of mangoes. When the price of mango is ₹5 per dozen. 5 dozen mangoes are demanded. Similarly, when the price of mango is ₹10 per dozen only 4 dozen mangoes are demanded. DD is the demand curve. Similarly, when the price of mango is downwards, from left to right. This is an important characteristic of the demand curve. This is so because, the demand for mangoes goes on increasing as the price falls

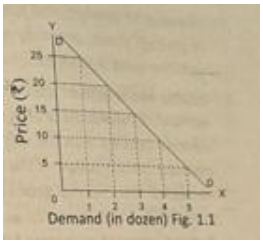
Market Demand Curve

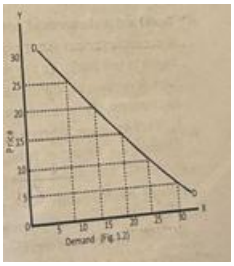
Market demand curve is the graphical representation of market demand schedule. It is obtained by adding individual demand schedules.

Fig. 1.2 shows the market demand curve (on the basis of market demand schedule).

The market demand curve also represents an inverse relation between the quantity demanded and s price of a product.

Market demand curve is flatter than the individual demand curve. It happens so because as price changes, proportionate change in market demand is more than proportionate change in individual demand.





Factors Affecting Demand (Determinants of Demand)

Demand of a commodity may change. It may increase or decrease. It happens due to change in certain factors. These factors are called determinants of demand. The following are the factors which determine the demand (or determinants of demand) of a commodity:

1. Price of commodity: Price is the basic factor influencing the demand. When prices change demand also changes. When the price increases, the demand falls and vice versa

2. Nature of commodity: Demand depends on whether the commodity is a necessity or a luxury or a prestige etc. Demand of necessary goods generally remains constant. Demands of comforts and luxuries change with the change in their prices. Demand of prestige goods, generally remains constant. Demand of durable goods chat with change in their price. Thus the nature of commodity determines the demand

3. Income and wealth of consumers: Change in income can bring about a change in demand. If the income of consumer increases, the demand for normal goods will increase because with the increase in income, he can spend more amount on the purchase of such goods, If the income decreases the demand for normal goods also decreases. Thus, normal goods are goods for which the demand increases as income rises and demand decreases as income falls. Inferior goods are goods for which demand increases as income falls and demand decreases as income rises. In the case of normal goods, there is a direct or positive relationship between income and demand In the case of inferior goods, there is an inverse or negative relationship between income and demand.

4. Tastes and preferences of consumers: Any change in fashion, taste, and preference of consumers brings about changes in demand. For instance, today more ladies have to use jeans. So the demand for jeans have now increased. Today, child have developed a taste for eating chocolate. Hence there is an increase in demand for chocolate. If all on a sudden, consumers dislike a particular commodity, the demand for it will decrease. When some goods go out of fashion, they will be demanded Similarly, if a consumer is habitual of consuming a particular commodity he will purchase it irrespective of its prices (e.g., cigarettes).

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

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

Complementary goods: Two goods are said to be complementary of each other where they are used together. In the case of complementary goods, if the demand of original commodity increases (due to fall in price or change in other factors), the demand of complementary goods will also increase. Similarly, if the demand of original commodity decreases (due to rise in price or change in other factors), the demand of complementary good's will also decrease. For example, if the demand for pen decreases, the demand for ink will also decrease

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

7. Advertisement: Advertisement will create, maintain and increase the demand of goods. For example, now there is a tendency among the people to use dark paints for their houses. Hence, the demand for dark paints is increasing. This is due to the influence of advertisement. Thus advertisement influences the demand of goods.

8. Usefulness: Changes in usefulness cause changes in demand. For example, the demand for coats rises at the beginning of winter not because people's tastes change but because coats are more useful in the winter than in summer. Similarly the demand for Christmas cards rises in November and falls in January. The demand for air-conditioners rises each summer and falls afterwards.

9. Changes in population: A change in the population of the country may cause change in the demand for various goods and services. For instance, India had a population of 43 crores in 1961 which increased to 118 crores in 2010. Now the population is 130 crores. With the increase in the population, we have seen that there is an increased demand for food, clothing and many items. In short, an increase in population will lead to an increase in the demand and vice versa.

The composition of population also affects demand. Composition of population means the proportion of young and old and children as well as the ratio of men to women. A change in composition of population has an effect on the nature of demand for different commodities.

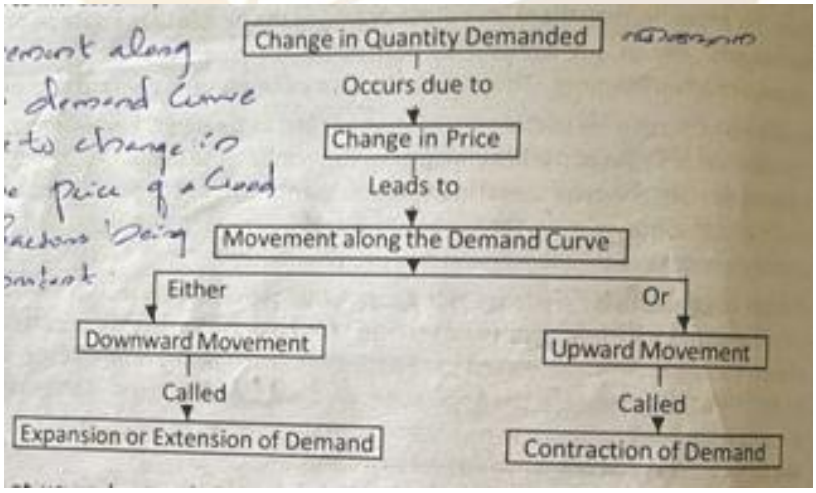
10. Distribution of income and wealth: Distribution of income and wealth in the society also affects the demand of commodities. If there is an unequal distribution of income and wealth in the country, demand of the goods of comforts and luxuries will be greater. If there is equal distribution of income and wealth, demand of necessary goods and comforts will be greater.

11. Change in the quantity of money in circulation: When the money in circulation increases, people will have more purchasing power, Hence demand will increase

Conversely, if money in circulation decreases, people will have less purchasing to and therefore, demand for goods and services also decreases.

Change in Quantity Demanded (Movement along the Demand Curve)

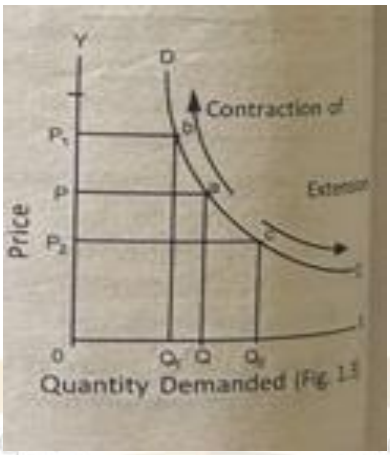
When quantity demanded of a commodity changes due to a change in its price, other factors constant, it is called change in quantity demanded. It is graphically ex as movement along the demand curve. It may be either a downward movements upward movement along the same demand curve. Downward movement along the demand curve is called expansion or extension of demand. In short, increase in dem due to fall in price is called expansion or extension of demand. Upward movement the same demand curve is called contraction of demand. In short, decrease in demand due to increase in price is called contraction of demand.



Let us understand the movement along the demand curve (expansion and contraction of demand) with the help of the following diagram (Fig. 1.3):

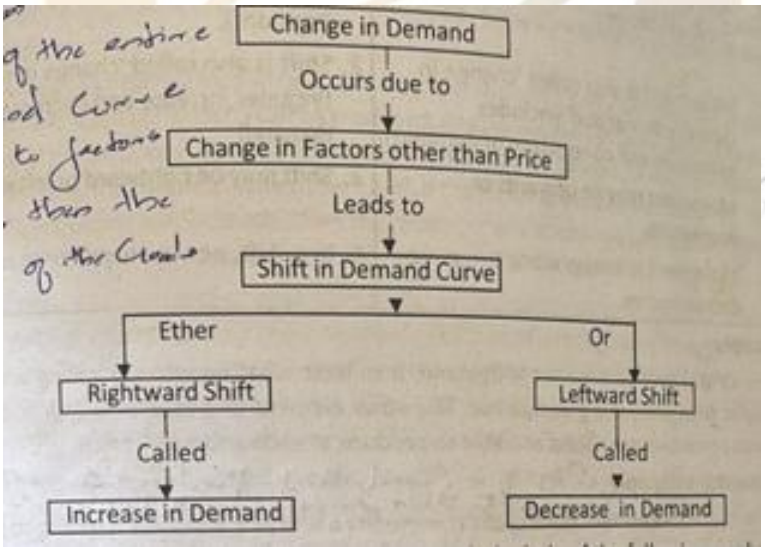
When price is OP, the quantity demanded is OQ. Suppose the price falls from OP to OP,, demand will be increased to OQ,. This is a downward movement along the demand curve DD from a to c. This indicates extension or expansion of demand. When the price rises to OP,

the demand will be decreased to OQ. This is an upward movement along the demand curve from a to b. This indicates contraction of demand.



Change in Demand (Shifts in Demand or Shifts of Demand Curve)

When demand of a commodity changes due to a change in other factors, other than price of the commodity, it is called change in demand. Change in demand is also known as shift in demand. A change in demand will shift the demand curve either to right or to left. A rightward shift in demand curve is called increase in demand. Leftward shift in demand curve is called decrease in demand



Let us understand the shift in demand curve with the help of the following graph:

In the given diagram (Fig. 1.4), DD is the original demand curve. When the demand increases, (e.g., due to increase in income) the curve will shift rightwards to DD, without any increase in price. It is constant at OP. Similarly when the demand decreases, (eg., due to decrease in income) the curve will shift leftwards to DD. The price remains constant.

Thus extension of demand is different from increase in demand. Likewise, contraction of demand doesn't mean decrease in demand.

It should be noted that extension and contraction of demand is called "change in quantity demanded" and shift in demand is called "change in demand". Thus there is a difference between "change in quantity demanded" and "change in demand".

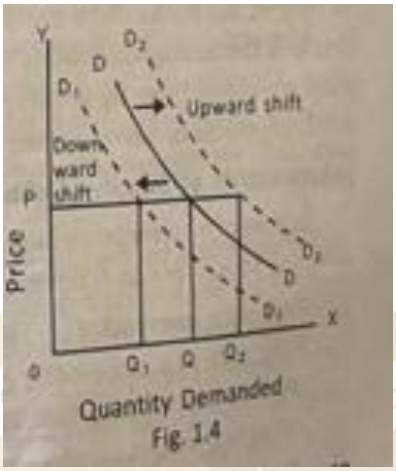


Fig. 1.4

Difference between Movement along the Demand Curve and Shift of Demand curve

Movement along the demand curve and shift in demand curve are different Fo are the differences:

Movement	Shift
1. Movement occurs when price of a product changes.	1. Shift in demand curve occurs when there are changes in other factors (price constant).
2. Movement is also called 'change in quantity demanded' (includes expansion and contraction of demand).	2. Shift is also called 'change in demand (includes increase and decrease in demand)
3. Movement may be upwards or downwards	3. Shift may be rightward or leftward.
4. Movement is always along the same demand curve.	4. In a shift, new demand curve is drawn

Supply

One aspect of a market is demand. It reflects what people are willing and able buy at each price in a given period. The other element of a market is supply. It reflects what producers are willing and able to produce at each and every price.

Meaning of Supply

Supply means the quantity y of a commodity a firm of or a producer is willing to supply a given price during a given period of time. Harvey gives a simple definition for supp He defined supply as "how much of a good will be offered for sale at a given time". Tha supply is

the actual quantity offered for sale in a given market at a given price over given period of time by a firm or a producer. In short, supply is the quantity of good which producer or seller agrees to sell in market at a certain price.

Determinants of Supply (Factors Affecting or Influencing Supply)

Supply of a commodity depends upon several factors. Some of the important factor affecting supply are as follows:

1. Price of the commodity: Price is the most important determinant of supply of a commodity. If the price of a commodity increases, its supply will also increase and vice versa. If the price of a commodity falls, its supply will also fall. Thus, there is a direct relationship between price and supply.

2. Cost of production: Cost of production represents the prices of factors of production used in the production process. Thus, cost of production affects the supply of a commodity. When the cost of production increases, the supply decreases. When the cost of production decreases, the supply increases. Thus, there is an inverse relationship between cost of production and supply.

3. Price of related goods: Supply of a commodity depends upon the price of its related goods, especially substitute goods. If the price of a substitute good goes up, the producer will increase the supply of the commodity so as to get higher profit. Similarly, If the price of the substitute goods falls, the producer will increase the supply of the commodity.

4. Technology: The technology decides the supply of the commodity. Technology simply refers to the way a commodity can be produced. An improvement in technology reduces the cost of production. As a result, it becomes more profitable to produce the commodity. This increases the supply. On the other hand, if the technology becomes obsolete, the cost of production will increase. Then the producer will reduce the production of the commodity. As a result, the supply of that commodity decreases

5. Govt. policy: Government policy also affects the supply of a commodity. If the Government imposes heavy taxes on the production of a commodity, its supply will decrease. This is because the producer will reduce the production of the commodity due to high cost. On the other hand, if the Govt. announces tax concessions on the production of a commodity, its supply will increase.

6. Means of transportation and communication: If the means of transportation and communication are well developed in a country, supply of commodities fan be easily controlled. When there is an excess supply of a commodity in an area, it can be shifted to other areas supply

7. Prices expectation: The producers' or sellers' expectations about the future prices of goods may affect their supply. When they expect a higher price for a commodity in the

future, they would tend to postpone its sale. Hence, supply decreases. Similarly, if they expect that the price of a commodity will fall in future, they would tend to increase their supply.

8. Agreement among producers: Sometimes there is an agreement among producers of a commodity in respect of the quantity of its production and supply. Such an agreement is made with a motive of earning maximum profit through control on production and supply. In such a case, the supply of commodity will decrease.

9. Natural factors: The supply of agricultural goods to a large extent depends upon the natural factors such astrain, climate, fertility of land, irrigation facilities etc. If these factors are favourable, supply will increase. On the contrary, floods, earthquakes droughts etc, adversely affect agricultural production. As a result, supply will decrease

10. Times periods: Supply of product is also related to time period. Marshall classification markets on the basis of time.

These factors are also called the limitations of supply.

Law of Supply

The law of supply is known as 'the second law of market. A high price encourage suppliers to produce and sell more of the good. Accordingly, the law of supply states the at higher prices higher quantity will be supplied and at lower prices lesser quantity will be supplied. Marshall stated the law of supply as "other things remaining constant more is offered for sale at higher prices than at lower prices". Thus, the law established a direct relationship between price and supply.

Assumptions of the Law of Supply

The law of supply is based on the following assumptions:

1. There is no change in the income of the buyers and sellers.

2. There is no change in the level of technology.

3. There is no change in the prices of related goods.

4. The price of factors of production remains unchanged.

5. Production is subject to law of constant returns.

6. Supply of factors of production is elastic.

Supply Schedule

Law of supply can be explained with the help of supply schedule and supply curve, fact, a supply schedule is essential for constructing a supply curve. A supply schedule in tabular presentation of information relating to price and quantity supplied of a good. It is schedule

of different quantities of a good, which a producer or seller is willing to supply different price levels of that good. In short, supply schedule is the tabular form of law a supply.

Types of Supply Schedule

A supply schedule can be of two types, namely, individual supply schedule and market supply schedule.

Individual supply schedule: An individual supply schedule is a list of various quantities of a commodity which are offered for sale by an individual supplier or seller at different prices.

Market supply schedule: Market supply schedule shows how much quantity is supplied by all suppliers or sellers in the market at different prices.

Following table shows the individual supply schedules of sellers A, B, C and D and the market supply schedule (assume that there are only 4 sellers of the commodity milk)

Price of milk per liter	Qty. supplied by individual sellers (individual supply schedule)				Qty. supplied by all sellers (market supply schedule)
	A	B	C	D	
15	5	6	8	6	25
20	6	7	10	7	30
25	7	8	11	9	35
30	8	10	12	10	40

Supply Curve

The law of supply can be explained with the help of supply curve also. When the supply schedule is shown graphically, it is called a supply curve. In short, the graphical representation of supply schedule is called supply curve. The supply curve tells the relationship between price and quantity supplied of a commodity. In the graph, the quantity supplied is shown on the X axis and the price on Y axis

Types of Supply Curve

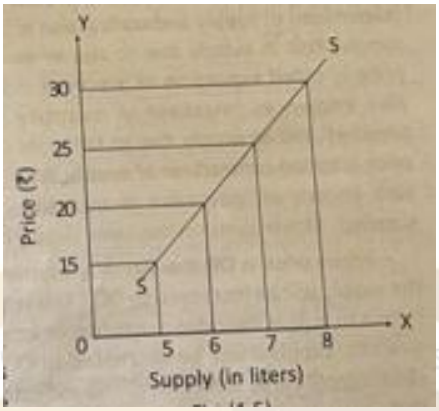
Supply curve can be of two types- individual supply curve and market supply curve**.**

Individual Supply Curve

Individual supply curve is the graphical representation of individual supply schedule. Let us construct an individual supply curve by taking the price and quantity supplied by supplier A (as in the supply schedule).

In the given graph (Fig. 1.5) quantity of milk is measured on X axis and price of milk on the Y axis. When the price of milk is 15, the seller will supply 5 liters of milk. When the price of milk increases to 20, he will supply 6 liters of milk. SS is the supply curve. The supply curve

generally rises upwards from left to right. This is so because the 15 0 7 8 supply of milk goes on increasing as the price increases. Thus, the supply curve indicates the law of supply. In other words, the supply curve tells that there is a direct relation between price and supply. Any point on the supply curve tells what quantity is supplied at what price.



Market Supply Curve

Market supply curve is the graphical representation of market supply schedule. It is obtained by adding individual supply schedules.

Fig. 1.6 shows the market supply curve (on the basis of market supply schedule) 20

Like individual supply curve, the market supply curve also represents a direct relation between the price and quantity supplied.

Movements on the Supply Curve

When quantity supplied changes due to change in price only (other factors remain constant), it is called movement along the supply curve. Movement along the same supply curve is also called change in quantity supplied. Movements. are of two types, namely, extension (expansion) of supply and contraction of supply. Rise in supply due to rise in its Pi price is called expansion of supply. It is also known as 'increase in quantity supplied. Fall in supply due to fall in its price is called contraction of supply. It is also known as 'decrease in quantity supplied. Movements on the same supply curve is shown in the graph (Fig. 1.7).

When price is OP, the quantity supplied is OQ, Suppose the price increases to the supply will be increased to OQ. This is an upward movement along the supply c from a to b. This indicates expansion or extension of supply. When the price falls to Op quantity, supplied will be decreased to OQ. This is a downward movement along the same supply curve from a to c. This indicates contraction of supply.

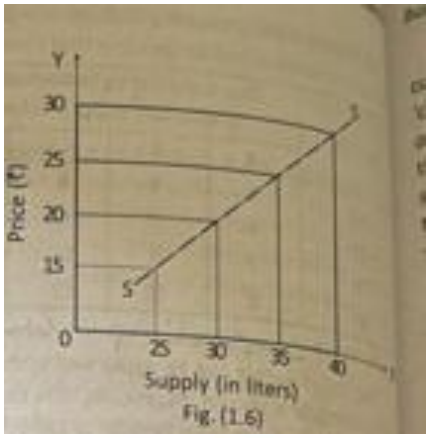
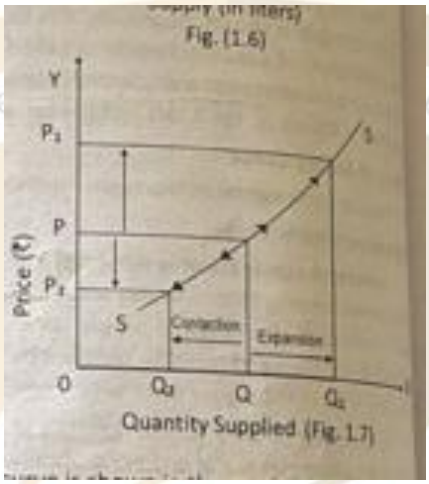
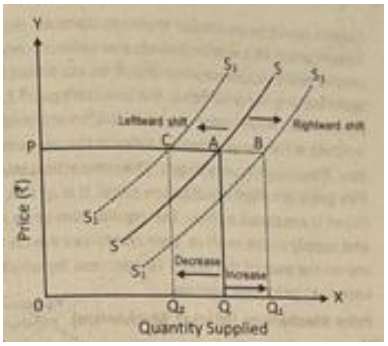


Fig. (1.6)



Shifts in Supply Curve

We know that the supply depends not only on price but also on other factors le price of related goods, change in technology, change in government policy etc. The change in supply due to change in any of the factors other than the price is called shift in supply curve. Shift of supply curve is also called change in supply. Change in any one of the factors (other than price) shifts the entire supply curve. A change in supply will shift the supply curve either to the right or to the left. A rightward shift in supply curve is called 'increase supply A leftward shift in supply carve is called 'decrease in supply, Shift in supply curve is shown in the following diagram (Fig. 1.8):



In the given diagram, SS is the original supply curve. When the supply increases (eg. due to government policy) the curve will shift rightwards to 5.5, without any increase in price. Price is constant at OP. The rightward shift in supply curve is called 'increase in supply. When the supply decreases (e.g., due to change in government policy) the curve will shift leftwards to SS. The price remains constant. The leftward shift in supply curve is called 'decrease in supply'

Difference between Movement on the Supply Curve and Shift in Supply Curve

Movement on the supply curve and shifts in supply curve are different. Following are the differences:

Movement	Shift
1. Movement occurs when price of a product changes.	1. Shift in supply curve occurs when there are changes in other factors (price remains constant).
2. Movement is also called 'change in quantity supplied (includes expansion and contraction of supply).	2. Shift is also called "change in supply (includes increase and decrease in supply).
3. Movement may be upwards or downwards	3. Shift may be rightward or leftward.
4. Movement is always along the same supply curve.	4. In a shift, new supply curve is drawn.

Price Mechanism

A market is a place where buyers and sellers meet together. Sellers want to maximise their profits. Hence, they want to sell the goods at the highest price. At the same time, buyers want to maximise their satisfaction. Hence they want to buy the goods lowest price. In a market buyers and sellers interact with each other. They mainly on the price. Suppose your friend wants to sell his iPhone for ₹ 1,00,000. Suppose were looking for an iPhone. But you can't pay 1,00,000, You ask your friend to price down. After some negotiations, your friend brings the price down to ₹75000 amount is OK for you because this is the amount you were willing to buy an iPhone for. Your friend is also very happy. The transaction takes place at this agreed price of This price is called equilibrium price. It is at this price the seller is ready to sell and buyer is prepared to buy. The equilibrium price is determined by the forces of d and supply in the market. Demand forces are on the part of the buyer and supply forces are on the part of the seller. The process by which the equilibrium price is determined known as price mechanism.

Price Mechanism (Market Mechanism)

Price mechanism refers to the process of price determination by the interaction Audits equilibrium price. There are three components of price mechanism. They are Supply in the free market forces of demand and supply. Demand and supply of a commodity determine demand, (b) supply, and (c) equilibrium price.

The price mechanism works when demand forces and supply forces intersect come other. If there is more demand than supply, prices will rise, encouraging producers to produce more, If there is more supply than demand, prices will fall, leading to mov Peace people buying the product. Equilibrium price is the price at which the quantity demanded is equal to the quantity supplied.

Equilibrium

Price is dependent on the interaction between demand and supply components of market. Demand and supply represent the willingness of consumers and produces engage in buying and selling. An exchange of a product takes place when buyers and sellers agree upon a price.

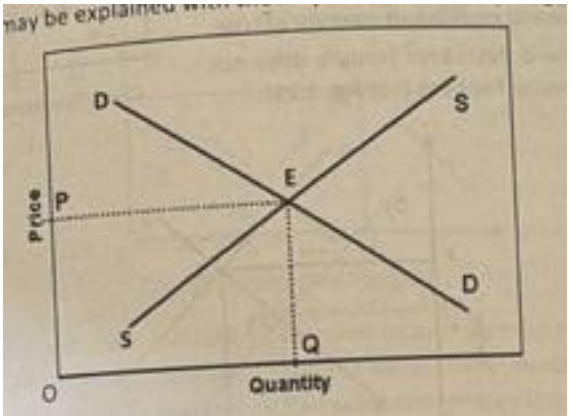
Meaning of Equilibrium

The word 'equilibrium' has been derived from the two Latin words, namely, acquis and 'libra'. Acquis means 'equal and libra means 'balance'. Thus, equilibrium means equal balance.

Equilibrium is the situation in which market supply and demand balance each other and as a result prices become stable. Generally, an over-supply or excess of goods or services causes prices to go down. This results in higher demand. An under-supply shortage causes prices to go up. This results in less demand.

Prices tend to fluctuate around the equilibrium levels. If the price rises too high, market forces will motivate sellers to come in and produce more. The buyers will buy yes because the price is too high. As a result, the demand decreases and gradually the once also decreases. If the price is too low, additional buyers will buy and existing will buy more. But the sellers will produce and supply less because the price is 100 low. As a result, demand increases and gradually price also increases over time.

Equilibrium may be explained with the help of the following diagram (Fig. 23)



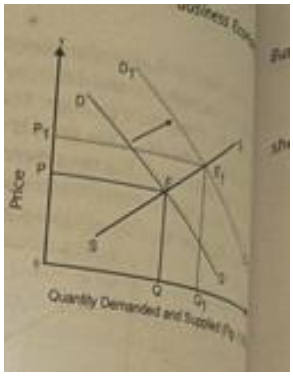
In Fig. 1.9, DD is the demand curve and SS is the supply curve. Point E is the equilibrium point. It is at this point, the demand curve and supply curve intersect each other. In other words, equilibrium point is the point at which demand and supply are equal. OP is the equilibrium price. It is the price at which demand is equal to supply. OQ is the equilibrium quantity. It is the quantity that the buyers are willing to buy and the sellers are willing to sell at the equilibrium price.

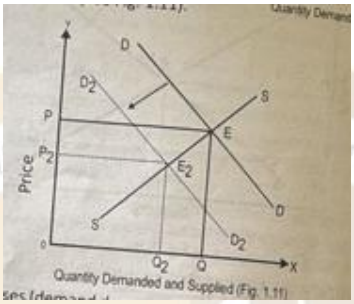
At any price below OP, the quantity demanded is greater than the quantity supplied. In such a situation, consumers would buy more. But producers would not be willing to supply. Thus, a shortage would exist. In this event, consumers would choose to pay a higher price in order to get the product they want. At the same time, producers would be encouraged by a higher price to bring more of the product onto the market. Gradually, the price will rise to OP. Here, supply and demand become equal. Similarly, if a price is above OP, the consumers would demand less. But producers would be ready to supply more. This leads to excess supply. As a result, producers would be willing to reduce the price in order to sell and consumers would buy more due to lower price. Thus, price falls to OP. Only at OP price, the price tends to be steady.

New Equilibrium

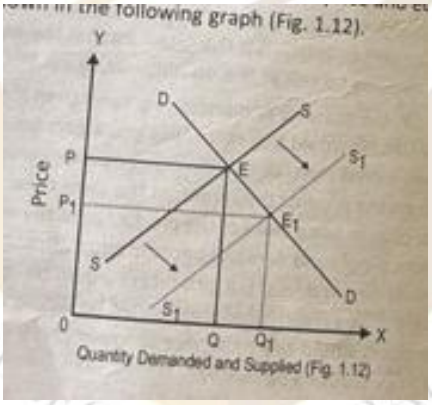
Whenever there is a change either in demand or in supply or in both, the equilibrium will change. The firm or industry will reach at new equilibrium P point (as in Fig. 1.10). If the demand increases (supply remains the same) the firm or industry reaches at a higher equilibrium level. It means the equilibrium price and equilibrium quantity will rise.

If the demand decreases (supply does not change), the reverse happens (see Fig. 11.1)

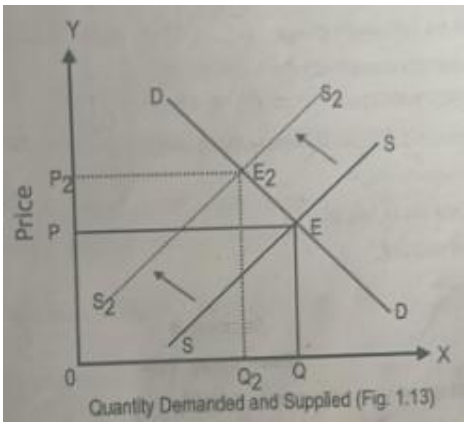




If the supply increases (demand does not change) the firm or industry will reach a lower equilibrium level. That means the equilibrium price and equilibrium quantity w decrease. This is shown in the following graph (Fig. 1.12)



If the supply decreases (demand remains the same) the opposite happens, This is shown in the following graph (Fig. 1.13)



If both demand and supply increase (to the same extent) then the equilibrium price will remains the same. But the equilibrium quantity will of course increase.

If both demand and supply decrease (to the same extent) then the equilibrium price will remains the same, but the equilibrium quantity will of course decrease.

Note: Detailed price and output determination will be given in the 3rd module.

CHAPTER 2

FOUNDATIONS OF DEMAND AND SUPPLY

For any market, demand and supply are like the two sides of a coin. Buyers represes the demand side and sellers represent the supply side.

Characteristics of Consumer Demand

Understanding the characteristics of demand is essential for businesses. It is useful pricing, forecasting sales, and devising marketing strategies. Let's examine the main characteristics of demand:

1. Dynamic in nature: Demand is dynamic in nature. It means the demand for a product never stays the same in the market. For example, the demand for Moisturizing cream and woolen clothes increases in winters and decreases in summers. Moreover, the demand of a product also depends on the quality of the product or service.

2. Depends on price: Demand depends upon price. Usually, when prices increate demand decrease and vice versa. Because of this reason, companies pay so much attention while deciding the price of the product. The price of product should ne exceed the price of the products of competitors.

3. Depends on supply: Supply and demand for a product or service are proportional to each other. It is said so because the demand for a product increase when there is low supply in the market. People get ready to pay any price to get their hands on the product.

4. Demand depends on the competition: Competition affects demand largely. The demand for product will be at a peak when a company has a monopoly in the market. It can sell its product at the desired price. People would still buy it in case of a monopoly. But if there is competition in the market, demand for a product will fall This is because customers will get divided even when there is still demand for the product in the market.

5. Demand is affected by multiple factors: Demand depends not only on price but also on other factors such as income, tastes and preferences, prices of related goods, and expectations, etc.

6. Demand is based on willingness and ability to pay: Demand reflects both the lingness and ability of consumers to pay for a good or service. To constitute demand, consumers must not only desire a product but also possess the financial capacity to acquire it. A person who desires a luxurious car but lacks the financial capacity to purchase does not contribute to the demand for that car.

Demand Analysis

Success in business requires a solid understanding of the market. One fundamental to analyse the demand

Meaning of Demand Analysis

Demand analysis is the process of assessing the demand for a particular product or service in a market. It examines factors influencing consumer purchasing decisions, such as price, preferences, and market conditions. By understanding these factors, businesses can make decisions about production, marketing strategies, and sales forecasts.

Approaches to Analyzing Consumer Demand

Analyzing consumer demand helps businesses and economists understand how consumers make purchasing decisions and how different factors influence those decisions. There are several approaches used to study and analyze consumer demand. Following are the important ones:

1. The Cardinal Utility Approach: This approach assumes that consumers can measure and assign a numerical value to the satisfaction (or utility) they get from consuming a good or service. The idea is that consumers make decisions to maximize their total satisfaction, choosing goods and services that give them the most utility. The criticism against this approach is that it is difficult to measure satisfaction in exact numbers"\

2. The Ordinal Utility Approach: Unlike the cardinal utility approach, the ordinal utility approach does not require consumers to measure their satisfaction in numbers. suggests that consumers rank their preferences in order. For example, you might prefer an apple over a banana, but you cannot say by how much. This approach focuses on the idea that people make choices based on their preferences and the rankings of goods Cannot rather than trying to measure exact levels of satisfaction

3. The Indifference Curve Analysis: This approach This approach focuses on the combination of two goods that give a consumer the same level of satisfaction. An indifference curve shows all the different combinations of two goods (like apples and bananas) that a consumer would consider equally good. The curve helps to understand how consumers balance their spending between different goods. The consumer's goal is to reach the highest possible indifference curve while staying within their budget

4. The Budget Line Approach: This approach combines the idea of a consumer's truth and their preferences. A budget line represents all the combinations of two goods consumer can afford, based on their income and the prices of the goods. By analyzing a budget line and the indifference curves, economists can see how consumers make choo based on their income and the price of goods

5. The Demand Curve Approach: This is one of the most widely used approaches analyze demand. It shows the relationship between the price of a good and the quantity demanded by consumers. The demand curve typically slopes downward. It represents the law of demand. This approach is useful for understanding how changes in price Influence consumer behaviour in a simple, graphical way.

6. The Revealed Preference Theory: This approach focuses on observing the choice consumers actually make in the marketplace, rather than relying on their stated preferences. By looking at the goods consumers choose and how they behave when faced with different prices, business people can "reveal their preferences. This theory assumes that when people choose in the market reveals their true preferences, even if they can't explain them.

7. The Econometric Approach: This approach uses statistical methods are mathematical models to analyze consumer demand. It is possible to use data from rea markets to create equations that predict how demand will respond to changes in factor like price, income, and consumer tastes.

Marginal Utility Theory

We satisfy our wants by consuming commodities or services. When we consume commodity, we get some benefits or satisfaction from it. This means that the commodity possesses utility. That is why we demand the commodities and services. If a thing has no utility no one would demand it. Thus, utility is the basis of demand.

Meaning of Utility

When we consume a commodity, we get some satisfaction. This satisfaction is called utility. Thus, utility may be defined as satisfaction derived from the consumption of a commodity. In the words of Prof. Hobson, "Utility is the ability of a good to satisfy a want". In short, utility is the want satisfying power of a commodity. If a commodity does not satisfy a human want, then we say that it has no utility. Utility differs from person to person, place to place, and time to time.

Marginal Utility: Marginal utility is the additional satisfaction you get from consuming one more unit of a good or service. For example, if you're eating pizza and you eat second slice, the marginal utility is the extra satisfaction you get from that second slice compared to the first one.

Meaning of Marginal Utility Theory

The Marginal Utility Theory is a concept in economics that explains how consumers make decisions about how much of a good or service to buy. It focuses on the idea that people make choices based on the additional satisfaction, or marginal utility, they get from consuming one more unit of a product.

According to the Marginal Utility Theory, consumers will continue to buy more of a good until the marginal utility of that good is equal to its price. In simpler terms, consumers try to get the most satisfaction (utility) for their money. If the marginal utility of a product is higher than the price, they will buy more. But if the marginal utility is lower than the price, they will stop buying it. For example, if a Chocolate costs 10 and the satisfaction (utility) we get from eating it is worth ₹15, we would likely buy it. But if the utility we get from eating the second chocolate is only worth 5, we might decide not to buy it.

Consumers aim to spend their money in a way that maximizes total utility. This means they will allocate their budget to goods and services based on where they get the highest marginal utility per rupee spent. For example, if buying one good gives you a high satisfaction relative to its price, you might buy more of that good. But if another good gives you more satisfaction per rupee spent, you might decide to switch your spending.

Imagine you're thirsty and decide to buy bottles of water. The first bottle gives you a lot of satisfaction because you're very thirsty, so it provides a high marginal utility. The second bottle still satisfies you, but not as much, because you're less thirsty now. By the time you get to the fourth bottle, you might not be thirsty at all, and the satisfaction from the water (marginal utility) is very low. You may stop buying water because the utility from the next bottle isn't worth the cost.

Law of Diminishing Marginal Utility: One of the key ideas in marginal utility theory is the law of diminishing marginal utility. This law says that as you consume more of a product, the satisfaction (or utility) you get from each additional unit tends to decrease. For example, the first slice of pizza might make you feel very satisfied, but by the fourth or fifth slice, you may not enjoy it as much because you're already full. This is diminishing marginal utility: the more you consume, the less satisfaction you get from each additional unit.

Demand under Risk and Uncertainty

Prices or income may change unexpectedly. This would have an impact on the quantity that consumers would buy. That is, risk and uncertainty have an important role in the purchase decisions. Demand under risk and uncertainty refers to how consumers make purchasing decisions when they are unsure about future outcomes. In simple terms, it's about how people react when there's a chance that things might turn out differently than expected, like when prices or income might change unexpectedly.

Consumers would react to risk and uncertainty while taking purchase decisions other words, when consumers face risk and uncertainty, they often use certain to help them make decisions about what to buy. These strategies are ways to h themselves from potential losses or bad choices because they are unsure about might happen in the future. Let us examine how consumers will react when purchase decision. Some common strategies consumers use in demand decision risk and uncertainty:

1. Sticking to Essentials: Consumers often focus on the things they truly need unnecessary or luxury items. For example, during uncertain times, people might buying clothes or entertainment items, and instead, they focus on spending money on necessities such as food, utilities, and medical care.

2. Seeking Discounts and Bargains: In times of uncertainty, consumers tend to look discounts before making a purchase. They try to get the best value for their money. The could mean waiting for a special offer or using coupons. People want to ensure that their purchases are worth the money, especially when they don't know how things will chance in the future. This will reduce the current demand.

3. Saving More Money: Consumers often choose to save money when faced with uncertainty. Instead of spending on non-essential items, they may focus on building their savings as a cushion for unexpected events. This way, they can be better prepared for any financial challenges that may come up, like job loss or economic changes

4. Diversifying Choices: Another strategy is spreading out their risks by diversifying their purchases. For example, instead of putting all their money into one expensive item consumers might choose to buy multiple lower-cost items that serve the same purpose This way, if one item doesn't work out, they still have others to rely on. As a result, demand for luxury items will be less.

5. Postponing Purchases: When uncertain about the future, consumers may decides delay their purchases. If they're not sure about their future income or the state of the economy, they might hold off on buying things they don't absolutely need. This strategy allows them to wait until they feel more confident in their financial situation.

6. Relying on Trusted Brands or Familiar Products: During times of uncertainty consumers may choose to stick with brands or products they know well. They might avoid trying new products because they are unsure about the quality or value. For example instead of trying a new grocery store, they may continue shopping at the one they know offers the best prices and quality.

7. Using Insurance or Warranties: Consumers might buy insurance or extended warranties to protect themselves from risk. For example, when buying a big-ticket item like home appliance or a car, people might opt for an extended warranty or insurance coverage to ensure that if something goes wrong, they are financially protected. Business is full of risks and uncertainties. Risk is associated certain. Demand is uncertain. Hence, production

Demand and the Firm

Business is full of risk and uncertainties. Risk is associated with future. Future is uncertain. Demand is uncertain. Hence, production, cost, revenue, profit etc. are also uncertain. Through demand estimation and forecasting, the firm can minimise the with future, Future is cost, revenue, profit etc. are also uncertainties and risks.

Demand Estimation

It is very useful to know the current demand of a business enterprise. If it is known, managers can plan production and formulate various business policies.

Estimating Demand Function

There is a functional relationship between the demand and its various determinants. When this relationship is expressed algebraically, we get what is known as demand function. Thus, the mathematical expression of relationship between demand for a commodity and various factors determining its demand is called demand function. By estimating demand function it is possible to estimate current demand. A firm must know current demand, say, over a month or a half year or a year for its product in order to avoid the conditions of underproduction and overproduction. Such information about the current demand for a firm's product is known as demand estimation.

Meaning of Demand Estimation

Demand estimation may be defined as the process of finding current values of demand for various values of prices and other determining variables. In other words, demand estimation means estimating or quantifying a demand function by using data on quantity demanded, prices, income and so on. Demand estimation of a firm's product is for a short period. Demand estimation succeeds demand forecasting.

Steps in Demand Estimation (Process of Demand Estimation)

The process of demand estimation involves the following steps:

1. Identification of the variables: The first task in demand estimation is to identify the Independent variables that are likely to influence the quantity demanded (quantity demanded is the dependent variable). The independent variables include price of the product, price of substitutes, population, per capita income, advertising expenditure etc.

2. Collection of the data: Once the variables have been identified, the next step is to collect data on each of these variables. Data can be obtained from a number of Sources. The required data can be gathered from past records of the firm, publications of govt. agencies, trade associations, commercial banks etc.

3. Development of a model: The next step is to develop a mathematical model equation that indicates the relationship between the independent variables and th dependent variable.

4. Estimation of the parameters of the model: Once the mathematical model developed, the next step is to estimate the unknown values of the parameters of the model. For example, if regression model is developed, the unknown values of the population regression co-efficients are estimated by using 'n' pairs of sample observations.

5. Development of estimates based on the model: The last step is to prepare estimates of the demand function. The estimates are based on the mathematical model. The estimated co-efficient of the constant term suggests the quantity demanded if values of other variables are zero. In order to indicate the precision of the estimates, standard errors are calculated.

Tools or Techniques of Demand Estimation

There are several tools or techniques for demand estimation. Some of the important techniques may be briefly discussed here:

1. Consumer surveys (Consumer Interviews): Consumer surveys involve questioning a sample of consumers to determine their willingness to buy, their sensitivity to price changes, awareness of advertising campaign, their future intentions etc. In other words, this method involves questioning customers or potential customers to estimate the relation between demand and a variety of underlying factors. Such consumer interviews provide useful information relating to the demand function for a particular product.

2. Consumer clinics and focus groups: In this technique, experimental groups of consumers are given a small amount of money with which to buy certain items. The experimenter can observe the impact of price, prices of substitutes, and other variables on actual purchase. Then the group of consumers are closely observed discussing the choices they made and why?

3. Market experiments: Under market experiments, the product is displayed in selected stores. By changing various variables that determine demand (e.g., changing price. package etc.), the response of consumers is measured and quantified.

Another method is to simulate market experiences. Here, consumers are given money and are asked to make purchases while prices are changed. This way the company collects information on responses of buyers to changes in price or other variables.

4. Statistical techniques: A number of statistical tools are useful for estimating the demand function. The most important technique is regression analysis. Regression analysis derives an equation. This equation can be used to estimate the unknown value of one variable on the basis of known value of the other variable. For example, a firm's selling expense for next year is known. On the basis of this, it is possible to estimate the next year's unknown sales. Regression analysis describes the way in which the firm's sales are historically related to its selling expenses. Similarly, on the basis of given prices, it is possible to estimate the quantity demanded.

Demand Forecasting

Forecasting is essential for survival of business. Demand forecasting is crucial because it affects costs and revenues. In fact, demand forecasting is the logical starting point of all business planning.

Meaning of Demand Forecasting

Forecasting simply refers to estimating or anticipating future events. Forecasting is the prediction of future events on the basis of historical data, opinions, trends, or known future variables. Thus demand forecasting means estimating or anticipating future demand on the basis of past data. According to Evan J. Douglas, "Demand forecasting is the process of finding values for demand in future time periods". In short, demand forecasting means anticipating the future demand.

Difference between Demand Estimation and Demand Forecasting

Demand forecasting is different from demand estimation. Demand forecasting is preceded by demand estimation. Demand forecasting refers to predicting the future level of demand on the basis of current and past trends. It predicts future trends. On the other hand, demand estimation tries to find out the expected present level of demand on the basis of the current level demand determinants. Demand estimation is necessary to understand the impact of price changes on the quantity demanded. Demand forecasting involves foreseeing the future so that planning will be more meaningful. Demand estimation is for a short period, while demand forecasting is for a long period.

Objectives of Demand Forecasting

A. Short Term Objectives

1. To help in preparing suitable sales and production policies.

2. To help in ensuring a regular supply of raw materials

3. To reduce the cost of purchase and avoid unnecessary purchase.

4. To ensure best utilisation of machines.

5. To make arrangements for skilled and unskilled workers so that suitable labour force may be maintained.

6. To help in the determination of a suitable price policy.

7. To determine financial requirements.

8. To determine separate sales targets for all the sales territories.

9. To eliminate the problem of under or over production.

B. Long term Objectives

1. To plan long term production.

2. To plan plant capacity

3. To estimate the requirements of workers for long period and make arrangements.

4. To determine an appropriate dividend policy.

5. To help the proper capital budgeting

6. To plan long term financial requirements.

7. To forecast the future problems of material supplies and energy crisis.

Role and Importance of Demand Forecasting

Demand forecasting plays a constructive role in almost all branches of business and business management. Demand forecasting is the base of marketing planning. It is helpful in decision making and forward planning. The following points indicate the role played by demand forecasting in any organisation:

1. It enables a firm to produce the required quantities at the right time and arrange well in advance for the factors of production. This helps to avoid the possibilities of over production and under-production.

2. It helps in formulating an appropriate pricing policy because the price is determined on the basis of expected demand.

3. It helps in discovering new marketing opportunities.

4. It is the base for marketing planning. Without the knowledge of future expected demand, it is not possible to prepare correct marketing programme.

5. It reduces the business risks.

6. It helps in financial planning to avoid under-capitalisation and over-capitalisation.

7. It helps management in arranging the required labour force.

8. It is the foundation for budgeting.

9. It ensures a judicious allocation of resources of the firm among its various activities.

10. Production planning is possible.

Process of Demand Forecasting or Steps in Demand Forecasting

Demand forecasting involves the following steps:

1. Setting the objective: The first and the foremost step of the demand forecasting is setting the objectives. An organisation needs to clearly state the purpose of demand forecasting before initiating it. This step consists of: (a) Decide whether to forecast the demand for the whole market or for the segment of the market, (b) Decide whether to forecast the overall

demand for a product in the market or only for the firm's own products, and (c) Decide whether to forecast the market share of the firm.

2. Determining time period: The next step is to decide the time period for demand forecasting. Demand can be forecasted for a long period or short period. In the short run, determinants of demand may not change significantly or may remain constant. But in the long run, there is a significant change in the determinants of demand. Therefore, a firm determines the time period on the basis of its objectives set.

3. Selecting a method of demand forecasting: Demand can be forecasted by using various methods. The method of demand forecasting differs from firm to firm depending on the purpose of forecasting, time frame, availability of data etc. It is necessary to select the suitable method for saving time and cost and ensuring the reliability of the data.

4. Collecting data: Next step is collecting primary or secondary data. Primary data are collected through observation, interviews, and questionnaires. On the other hand, secondary data are data collected in the past but can be utilised at present

5. Estimating results: The data collected are analysed and interpreted. On the basis of analysis and interpretation of the data, an estimate of the future demand is made according to the method adopted.

According to William J. Stevenson, demand forecasting involves the following steps : (a) determine the purpose of forecasting, (b) establish a time horizon, (c) select a forecasting technique, (d) gather and analyse data, (e) make the forecast, and (f) monitor the forecast..

Methods of Demand Forecasting (For Established Products)

There are several methods to predict the future demand. All methods can be broadly classified into two: (A) Survey Methods, and (B) Statistical Methods.

(A) Survey methods

Under this method surveys are conducted to collect information about the future purchase plans of potential consumers. Survey methods help in obtaining information about the desires, likes and dislikes of consumers through collecting the opinion of experts or by interviewing the consumers. Survey methods are used for short term forecasting. Important survey methods are: (a) consumers interview method, (b) collective opinion or sales force opinion method, (c) experts opinion method, (d) consumers clinic, and (f) end use method.

(a) Consumers' interview method (Consumers survey): Under this method, consumers are interviewed directly and asked the quantity they would like to buy. After collecting then data, the total demand for the product is calculated. This is done by adding up all individua demands. Under the consumer interview method, either all consumers or selected few are interviewed. When all the consumers are interviewed, the method is known as complete

enumeration method. When only a selected group of consumers are interviewed, known as sample survey method.

(b) Collective opinion method: Under this method the salesmen estimate the expected sales in their respective territories on the basis of previous experience. Then demand estimated after combining the individual forecasts (sales estimates) of the salesmen.

(c) Experts opinion method: This method was originally developed at Rand Corporation in 1950 by Olaf Helmer, Dalkey and Gordon. Under this method, demand is estimated on the basis of opinions of experts and distributors other than salesmen and ordinary consumers. This method is also known as Delphi method. Delphi is the ancient Greek temple where people come and pray for information about their future,

(d) Consumer clinics: In this method some selected buyers are given certain amounts of money and asked to buy the products. Then the prices are changed and the consumers are asked to make fresh purchases with the given money. In this way the consumers responses to price changes are observed. Thus the behaviour of the consumers is studied On this basis demand is estimated. This method is an improvement over consumers interview method.

(e) End use method: This method is based on the fact that a product generally has different uses. In the end use method, first a list of end users (final consumers, individual industries, exporters etc.) is prepared. Then the future demand for the product is found either directly from the end users or indirectly by estimating their future growth. Then the demand of all end users of the product is added to get the total demand for the product.

Statistical Methods

Statistical methods use the past data as a guide for knowing the level of future demand. Statistical methods are generally used for long run forecasting. These methods are used for established products. Statistical met hods include: (i) Trend projection method, (ii) Regression and Correlation, (iii) Extrapolation method, (iv) Simultaneous equation method, and (v) Barometric method.

(i) Trend projection method: Future sales are based on the past sales, because future is the grand-child of the past and child of the present. Under the trend projection method demand is estimated on the basis of analysis of past data. This method makes use of time series (data over a period of time). We try to ascertain the trend in the time series The trend in the time series can be estimated by using any one of the following four methods: (a) Least-square method. (b) Free-hand method. (c) Moving average method and (d) semi-average method.

(ii) Regression and Correlation: These methods combine economic theory and statistical technique of estimation. Under these methods the relationship between the sales (dependent variable) and other variables (independent variables such as price of related goods, income, advertisement etc.) is ascertained. Such relationship established on the basis

of past data may be used to analyse the future trend. The regression and correlation analysis is also called the econometric model building.

(iii) Barometric technique: This is an improvement over the trend projection method. This method is based on the idea that future can be predicted from certain happenings in the present. Under this method, demand is forecasted just like weather is forecasted by meteorologists. They forecast weather conditions on the basis of movements of mercury in the barometer. Likewise, under barometric technique, certain economic and statistical indicators from the selected time series are used to predict variables. Personal income, non-agricultural placements, gross national income, prices of industrial materials, wholesale commodity prices, industrial production, bank deposits etc. are some of the most commonly used Indicators. This method was introduced by Harvard Economic Service in 1920. It was further revised by National Bureau of Economic Research in 1930s.

(iv) Extrapolation: Under this statistical method, the future demand can be extrapolated by applying Binomial expansion method. This method is used on the assumption that assumption that the rate of change in demand in the past has been uniform.

(v) Simultaneous equation method: This involves the development of a complete econometric model which can explain the behaviour of all the variables which the company can control. This method is not very popular. This method is also known as complete system approach of forecasting.

Costs

In order to produce goods, a firm needs inputs or input factors. A firm has to make payment for these input factors. Thus, input factors involve cost.

Meaning of Costs

Cost is the total expenditure incurred in producing a commodity. It is the sacrifice made by the businessman in order to produce goods and services. It is the total of implicit cost and explicit cost.

Nature of Costs

The nature of costs can be understood from the following characteristics or feature of costs.

1. Costs represent monitory expenses incurred by organisations for various purposes

2. Costs are essential for running a business. Without costs, a business cannot operate effectively.

3. Costs directly affect profits. In order to maximise profits, costs must be minimised.

4. Costs influence prices. If cost is high, price tends to be high and vice versa.

5. Costs are expressed in monetory terms.

6. Costs vary over time due to factors like inflation, market condition and changes in production process.

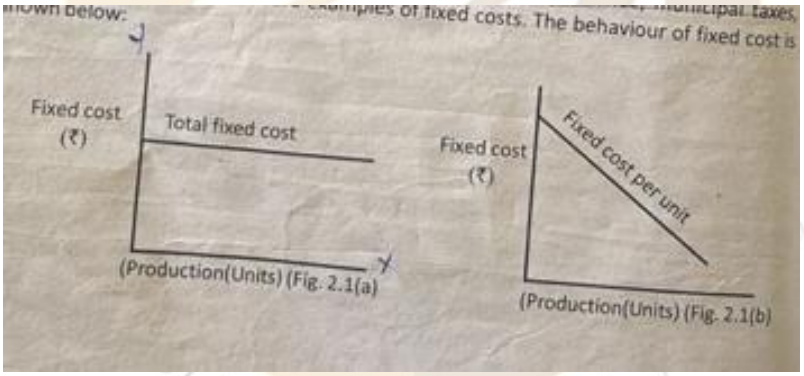
7. Costs always represent outflow of money.

Classification of Cost

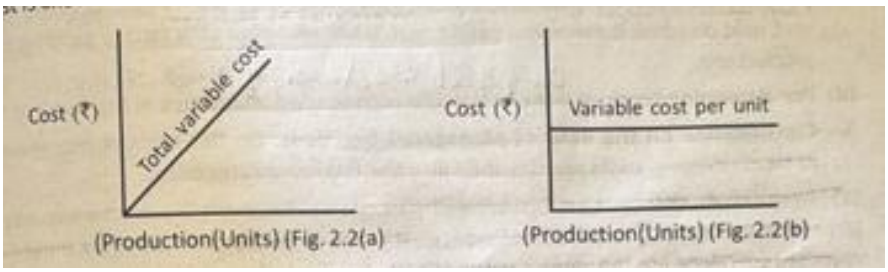
There are various ways of classifying costs. Each classification serves a different purpose. Following are the various bases of cost classification:

1. Classification According to Behaviour or Variability: On the basis of variability, costs are classified into fixed, variable, and semi-variable.

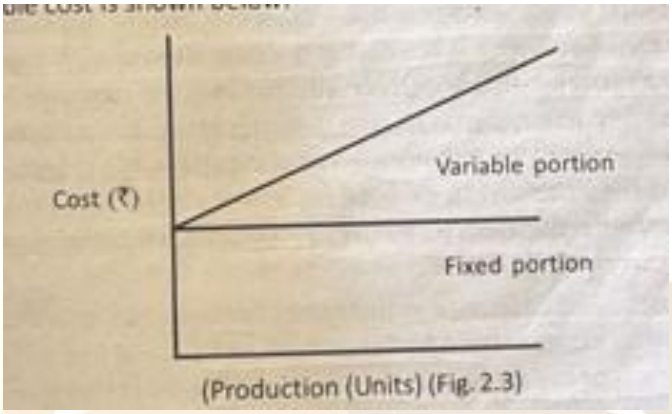
(a) Fixed cost: Fixed costs are those costs which do not change with changes in the volume of production. When production increases or decreases, the fixed cost (total) 'will remain fixed. However, it may vary according to time. Hence, fixed cost is also called time cost or period cost. It should be noted that fixed costs remain fixed only upto a certain level of activity (ie., Fixed only in the short period). It may vary in the long run. It may also be noted that fixed cost per unit will change with change in volume of output Rent and rates, salaries and wages of permanent staff, insurance, municipal taxes, depreciation of building etc. are examples of fixed costs. The behaviour of fixed cost is shown below:



b) Variable cost: Variable costs are those costs which vary directly with change in volume of production or volume of output. This means that when volume of output increases, total variable cost also increases proportionately. Similarly, when the volume of output decreases, total variable cost also decreases proportionately. But the variable cost per unit remains fixed. Examples of variable cost include direct material, direct labour, direct expenses, commission of salesmen and other variable overheads. These are direct costs. Variable costs are also known as product costs. The behaviour of variable cost is shown below:



(c) Semi-variable cost: These costs are partly fixed and partly variable. Telephone charges, repairs and maintenance, power charges, depreciation, supervision cost etc. are examples of semi-variable cost. These are also called mixed costs or semi-fixed costs. The behaviour of semi-variable cost is shown below:



2. Classification by Association with Time and Period: Costs can also be classified on the basis of time and period. According to this, costs can be classified into historical cost, product cost, period cost, and pre-determined costs.

(a) Historical costs: These are the costs which are incurred after the event takes place. They are nothing but actual costs.

(b) Product costs: These are the costs which are directly associated with the products are considered. These are the costs of making the finished products. Examples of product cost are direct material, direct labour and factory overheads, Thus, these are manufacturing cost

(c) Period costs: These are the costs charged as an expense in the profit and loss the period in which they are incurred. They are incurred on the basis of time. Genena expenses of fixed nature like depreciation, rent, salaries, insurance etc. are tread period costs. In short, period cost is the cost incurred in the period. It should be noted that rent paid on office building is a period cost, while rent paid on a factory building product cost

(d) Pre-determined cost: It is the cost which is computed in advance of production

3. Classification on the Basis of Managerial Decisions: On the basis of managerial decision-making, costs are classified into the following categories:

(a) Sunk costs: Sunk costs are historical or past costs. These are the costs which how already been incurred as a result of a decision made in the past. Such costs cannot be reversed or revised by a future decision. These are not relevant for decision-making Investment in plant and machinery is an example of sunk cost. As soon as a fixed asset purchased, its cost is sunk. This is so because the amount invested in plant and machine is sunk in the sense that the amount is irrecoverable or the decision is irreversible.

(b) Opportunity costs: Opportunity cost is the value of a benefit sacrificed in favour an alternative course of action. It is the cost of the best alternative foregone. It is the value of benefits foregone when one decision alternative is selected over another. To be more clearly, when one alternative is chosen over the other, the possible benefit lost from the rejected alternative is the opportunity cost of the alternative chosen. For example if an owned building is proposed to be used for a new project, the likely rent of the building if it is rented out is the opportunity cost. To conclude, we can think of opportunity cost as the opportunity lost.

(c) Differential costs: The difference in total costs between two alternatives is called differential cost. In the words of the AAA Committee, "differential cost is the increase or decrease in total costs, or the changes in the specific elements of cost that results from any variation in operation". If a decision results in an increase in cost, the differential cost is called incremental cost. If a decision results in a decrease in cost, the differential cost called decremental cost.

(d) Imputed costs: These are hypothetical or notional costs. These are computed for decision-making purposes. These costs are not actually incurred. These are expenses which an entrepreneur pays to himself. These are not recorded in the books. Imputed costs are considered while making a decision. Examples of imputed costs are rent on owned building, salary of owner, interest on owned capital, loss of asset value due to inflation etc.

(e) Out-of-pocket costs: Out of pocket costs are those costs that involve cash outflow immediately or in future. Material costs, labour costs, repairs, rent, insurance premium etc. are the examples of out of pocket costs. Depreciation on fixed assets and amortisation of intangible assets do not involve any cash outflow. Therefore, they are not out-of-pocket costs.

(f) Shut down costs: These are the costs (fixed) which will be incurred even if the plant is closed down temporarily due to raw material shortage, labour problem, fall in demand etc. Examples are rent, rates, depreciation, maintenance of plant, insurance of plant and machinery, interest on borrowed capital, salary of permanent staff etc.

(g) Marginal Cost: The word 'marginal' means 'additional' or 'extra. It is used to describe a change in an economic variable. Marginal cost is the additional cost of producing an additional unit. It is the cost of the last unit produced. It is the amount by which total changes when there is a change in output by one unit. For example, if the total producing 100 units of a product is ₹ 5,000 and the cost for 101 units is 5,040, the marginal cost of producing one additional unit is 40. Thus, marginal cost is the cost of one more or one less unit produced than the existing level of production.

Other Types of Costs

In addition to the types of cost given above, there are some other types of cost. They are:

Explicit Cost: Explicit costs are those costs, which are actually paid (or paid in cash). These are the payments made in cash to others (outsiders). Examples include wages paid to the employees, rent paid for building, payment for raw materials etc.

Implicit Cost: Implicit costs are those costs, which are not paid in cash to anyone. These are not actually incurred, but are computed for decision-making purposes. These are the costs, which the entrepreneur pays to himself. For example, rent charged on owned premises, wages of entrepreneur, interest on owned capital etc. Implicit costs are also known as imputed costs or hypothetical costs.

In economics, total cost is equal to explicit cost plus implicit cost.

Money Cost: Money cost means the total money expenses incurred by a business firm on the various items entered into the production of a particular product. For example, money payments made on wages and salaries to workers and managerial staff, payments for raw materials purchased, expenses on power and light, insurance, transportation, advertisement; and also payments made on the purchase of machinery and equipments etc constitute money cost of production. In short, cost expressed in monetary terms is known as money cost. Money cost is also called nominal cost.

Real Cost: Real cost is a subjective concept. Real cost means the real cost of production of a particular product. It also denotes the 'efforts of workers and sacrifices of owners undergone in the production of a particular product. It is the amount of pain r unpleasantness or real human sacrifice incurred for production. It is implicit cost.

Accounting Cost: Accounting costs represent all such expenditures, which are incurres by a firm on factors of production. Thus accounting costs are explicit costs. In short, all items of expenses appearing on the debit side of trading and profit and loss account of a firm represent the accounting cost. Accounting costs are also known as hard costs.

Economic Cost: Economists are of the view that in the estimation of cost of production not only the payments for factors of production (e.g., rent, wages etc.) but also the payments for self-owned factors (e.g., salary to entrepreneur, interest on owned capital, rent on owned premises etc.) are taken. Thus, economic cost refers to the total of explicit cost and implicit cost.

Social Cost of Production (or Social Costs): In the production of goods costs will be incurred not only by the owners of business but also by the society. Cost incurred by a society in terms of resources used in the production of a commodity is known as social cost of production. Social costs include not only the cost borne by the owners of a business (or producers) but also the cost passed on to the society. For example, production of certain commodities (chemicals, rubber, petroleum, steel etc.) causes environmental pollution. Pollution caused while producing a commodity imposes a social cost on those residents who suffer ill-health. Some industries leave wastes which the adjoining areas have to bear. A cost

that is not borne by the firm but is incurred by others in the society is called external cost. Social cost includes external costs and private costs (because firms are also a part of society). Thus, social cost is the total cost of the society on account of production of a commodity.

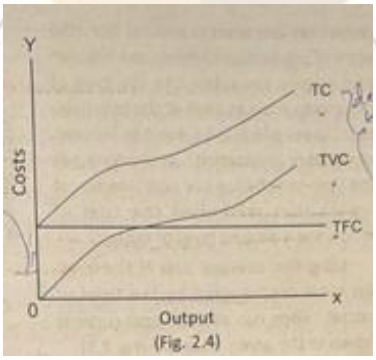
Short Run Cost

Short run is a period of time in which output can be increased or decreased by changing only the variable factors such as raw material, labour etc. In the short run the fixed factors such as building, capital equipment etc. cannot be changed. Thus during short period, some inputs are variable, while others are fixed. Short run costs are those costs which vary with output while fixed factors remain constant. In short, the cost relating to short run is called short run cost. In short, short run costs are the same as variable costs.

Short run Cost-Output Relationship (Short run Cost Function)

During the short run, the fixed factors (land, building, plant, machinery etc.) are constant. Output can be changed by changing the variable factors only, Short run cost-output relationship shows the relationship between output, total fixed cost, total variable cost and total cost. In the short period, fixed cost does not change. Therefore, as output. increases, the average fixed cost (AFC) falls. Variable cost (VC) increases but not proportionately. When more and more output is produced, average variable cost (AVC) will fall in the beginning and then it gradually increases.

In the short run, total cost is equal to fixed cost plus variable cost. Since fixed cost does not change, any change in total cost is due to change in variable cost. When output is zero total variable cost is zero. TVC increases with increase in output. In the beginning total variable costs (TVC) increases gradually but later more steeply. Even if the production is zero, the firm will incur fixed cost. Thus at zero output total cost (TC) curve starts from TFC. Total fixed cost remains fixed for all levels of production. These are shown in the Fig. 2.4.



(Fig. 2.4)

Long Run Cost

Long run is the period of time in which all input factors can be varied. In other words, in the long run there are no fixed costs but all costs are variable in the long run. In the long run, output can be increased or decreased by increasing or decreasing all input factors. Thus, long run costs are those costs which vary with output when all input factors (fixed and

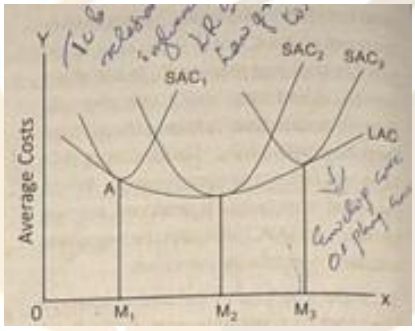
variable) are variable. These are the costs which are incurred on the fixed assets like plant, building, machinery etc. In short, the cost relating to long run is called long run cost.

Cost-Output Relationship in the Long-Run (Long run Cost Function)

In the long run the production can be increased or decreased by changing the fixed factors like plant, machinery, equipments, building etc. Thus in the long period all input factors are variable. No cost is fixed in the long run. This is because in the long run the firm will get sufficient time to install new plant and machinery and to sell old machines and buildings. Since all the costs are variable in the long run, there is no use of studying average fixed cost and average variable cost. In the long run, the study of average total cost only is relevant.

In the long run a firm has a number of alternatives with regard to scale of operation. For each scale of operation, there is an appropriate size of the plant. Thus the firm can move from one plant to another. Since the scale of production changes, the long run cost curves are subject to the laws of returns to scale as against the short-run cost curves which are subject to the laws of variable proportion. In the long run the firm can choose the combination of inputs that minimises the cost of producing a desired level of output.

Long run average cost is the long-run total cost divided by the level of output. Long run average cost curve is shown in the given diagram (Fig. 2.5):



The long run cost output relationship is shown by drawing a long run cost curve through short run curves because the long period is made up of many short periods. In the Fig.2.5, there are three different short run average cost curves for three different scales of production. Here there is one plant for each scale of production. For each of these scales, there is an optimum output. Three short run average cost curves SAC_1, SAC_2, SAC_3, corresponding to 3 different plants are drawn. The firm selects that short run plant which gives the lowest average cost of producing a desired volume of output. Suppose the firm thinks that output OM_1, is most profitable to produce. The plant represented by SAC_1, will then be installed because it will produce this output at the least possible cost per unit. To produce OM_2 output the producer can make use of plant represented by SAC_2 It is important to note that OM_2 output is produced at the minimum cost per unit with the help of plant represented by SAC_2. Hence OM_2, is an optimum output and SAC_2, represents plant of optimum size because SAC_2, has a lower minimum point than SAC_1, and SAC_3. The LAC is U-

shaped. But it is flatter than short run cost curves. The LAC curve is called an envelope curve because it envelopes or covers all the short run cost curves.

It is evident from Fig. 2.5 that LAC cannot be higher than SAC. LAC can never cut a SAC. It only touches the SAC curves. It is not necessary that LAC curve touches SAC curves at their minimum point. LAC curve helps in the planning of optimum size of a plant. For this reason, it is called planning curve also.

Production in the Short Run

Production is an important economic activity. It directly or indirectly satisfies the wants and needs of the people. Satisfaction of human wants is the objective of production.

Meaning of Production

Production simply means conversion of input into output. All those things which a firm buys and employs to produce a particular product are known as inputs. The goods and services produced are known as output. Thus, production is the activity that creates or adds utility and value. For example, Maruthi Udyog Ltd hire workers. They use machineries in factories to transform steel, fibre, glass, rubber and so on into automobiles.

In economic sense, production is the process of transforming tangible and intangible inputs into goods or services. Tangible inputs include raw materials, land, labour and capital. Intangible inputs include ideas, information, and knowledge. Inputs are also known as factors of production.

In the words of Fraser, "If consuming means extracting utility from matter, producing means creating utility into matter". According to Edwood Buffa, "Production is a process by which goods and services are created".

Thus, production is the process of producing goods and services by combining various factors of production. In short, production means producing goods and services.

Concept of Production Function

Production requires inputs or factors of production such as land, labour, capital, technology etc. A producer needs to know how much labour, capital and other inputs are required to produce a given quantity of the product or output. For example, 20 units of capital and 10 units of labour (inputs) are required to produce 100 units of the product (output). Thus, there is a relationship between input and output. Such relationship between physical inputs (20 units of capital and 10 units of labour) and physical output (100 units of the product) is called production function.

Thus, production function shows the functional relationship between physical inputs and physical output of a good or commodity. In other words, it is the technological relation between input and output.

The production function is largely determined by the level of technology. The production function varies with the changes in technology. Whenever technology improves, a new production function comes into existence. Therefore, in the modern3 times the output depends not only on traditional factors of production but also on the level of technology.

The production function can be expressed in an equation in which the output is the dependent variable and inputs are the independent variables. The equation is as follows:

Q = f (L, K, T.....n)

where, Q = output

L = labour

K = capital

T = level of technology

n = other inputs employed in production

Production function can also be represented by a table or graph.

It may be noted that production function does not establish any economic relation between input and output. It only establishes a technical relation between input and output. It is the engineers (not economists) who tell us that 10 units of labour and 20 units of capital are required to produce 100 units of the product. Thus, production function is purely a technical relation between input and output.

Concepts of Product

There are three concepts of product. They are:

Total Product or Total Physical Product (TP/TPP): Total product refers to total quantity of goods produced by a firm during a given period of time with the help of given inputs (one variable and others fixed).

Average Product or Average Physical Product (AP/APP): Average product is the out-put per unit of variable input. It is obtained by dividing the total product (TP) by the quantity of variable factors.

Marginal Product or Marginal Physical Product (MP/MPP): Marginal product is the change in the total product due to one unit change in that factor.

Production in the Short Run

Production in the short run refers to the process of making goods and services in a time period where at least one factor of production (like land, labour, or capital) is fixed or cannot be changed. In other words, in the short run, businesses can change some inputs, like labour or raw materials, but cannot fully change others, such as factory space or machinery.

When one input factor is used more and more (variable factor), keeping the other factors constant (fixed factors), output will increase in a peculiar manner. This can be examined with the help of the Law of Variable Proportion.

Law of Diminishing Returns or Law of Diminishing Marginal Product or Law of Variable Proportion (Returns to a Factor)

The law of variable proportion is the modern approach to the 'Law of Diminishing Returns (or The Laws of Returns). This law was first explained by Sir. Edward West (French economist). Adam Smith, Ricardo and Malthus (Classical economists) associated this law with agriculture.

On account of change in the proportion of factors, there will also be a change in total output, but at different rates. Initially, when more labour is employed on the fixed land, total output may increase at the increasing rate. But eventually, a stage comes when total product increases only at a diminishing rate.

The law of variable proportion states that, if one factor (variable) is used more and more, keeping the other factors constant, the total output will increase at an increasing rate in the beginning and then at a diminishing rate and eventually decreases absolutely.

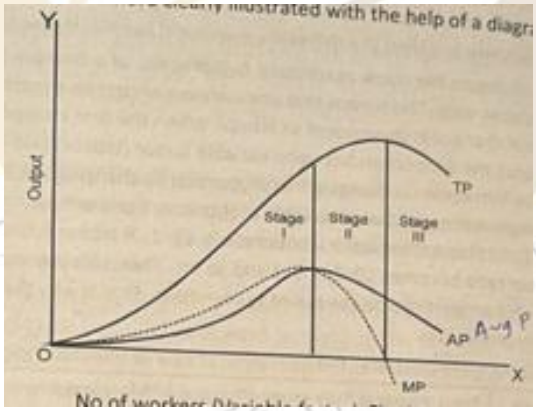
Suppose all inputs like plant, machinery, building etc. of a firm are fixed, while only the labour services vary. This means that any increase or decrease in output is achieved with the help of changes in the amount of labour. When the firm changes the amount of labour (variable), the proportion between variable factor (labour) and fixed factors will change. As the firm keeps on changing this proportion by changing the amount of labour (variable), it experiences the law of variable proportion. For example, there are 10 acres of land (fixed) and I labour, the land-labour ratio is 10: 1. If labour is increased from 1 to 2, land-labour ratio becomes 10: 2 or 5: 1 and so on. Thus, this law shows the effect of changes in factor proportions on the quantity of output. That is why the law is called the law of variable proportion.

The following table illustrates the operation of Law of Variable Proportion:

No. of Workers (Variable input)	Total Physical Product (TPP)	Average Physical Product (APP)	Marginal Physical Product (MPP)	Remarks
1	10	10	10	
2	24	12	14	First
3	39	13	15	Stage
4	56	14	17	
5	70	14	14	
6	78	13	8	Second
7	84	12	6	Stage
8	84	10.5	0	
9	81	9	-3	Third Stage

In the above table we can see that both the average and marginal products increase at first and then decline. Average product is the product for one unit of labour. It is calculated by dividing the total product by the number of workers. Marginal product is the additional product resulting from additional labour. The total product increases at an increasing rate till the employment of the 4th worker. Beyond the 4th worker, the marginal product Is diminishing. The marginal product declines faster than the average product. When? workers are employed, the total product is maximum. For 8 workers marginal product zero and the marginal product of 9 workers is negative. Thus when more and more units labour are combined with other fixed factors, the total product increases first at an increasing rate, then at a diminishing rate and finally it diminishes.

The above idea can be more clearly illustrated with the help of a diagram (Fig. 2.6)



The extra output obtained by applying extra unit of a variable factor may be greater than, equal to and less than the output of previous period. That is why, this law has three stages. The law of variable proportion may be explained under the following three stages as shown in the graph:

Stage 1: Total product increases at an increasing rate and this continues till the end of this stage. Average product also increases and reaches its highest point at the end of this stage. Marginal product increases at an increasing rate. Thus TP, AP and MP-all are increasing. Hence this stage is known as stage of increasing return.

Stage II: Total product continues to increase but at a diminishing rate until it reaches its maximum point at the end of this stage. Both AP and MP diminish, but are positive. At the end of the second stage, MP becomes zero. MP is zero when the TP is at the maximum. AP shows a steady decline throughout this stage. As both AP and MP decline, this stage is known as stage of diminishing return.

Stage III: In this stage the TP declines. AP shows a steady decline, but never becomes zero. MP becomes negative. It goes below the X axis. Hence, the third stage is known as stage of negative return.

According to classical economists there were three laws of returns: (i) Law of increasing returns, (ii) Law of constant returns, and (iii) Law of diminishing returns. But the modern economists do not accept this. According to them there are not three laws of production but there is only one law of production, i.e., law of variable proportion and it has three stages.

Production in the Long Run

Production in the long run refers to the period of time when all factors of production-like land, labour, and capital can be changed. Unlike the short run, where at least one input is fixed, in the long run, businesses can make changes to everything they use in production. This means they have more flexibility to adjust their operations to meet demand.

When all input factors are changed, output will change in a peculiar manner. This can be examined with the help of the Laws of Returns to Scale.

Laws of Returns to Scale

In the long period, output can be increased by increasing all the input factors. The law of returns to scale is concerned, not with the proportions between the factors of production, but with the scale of production. The term return to scale means the changes in output as all factors change in the same proportion. If the firm increases the units of both factors, labour and capital, its scale of production increases. According to Prof. Roger Miller, "Returns to scale refer to the relationship between changes in output and proportionate changes in all factors of production". The law of returns to scale seeks to analyse the effects of scale on the level of output.

Assumptions of the Laws of Returns to Scale

The following are the assumptions of the laws of returns to scale:

1. All input factors are variable.

2. There are no technological changes.

3. There is perfect competition.

4. The output is measured in quantities.

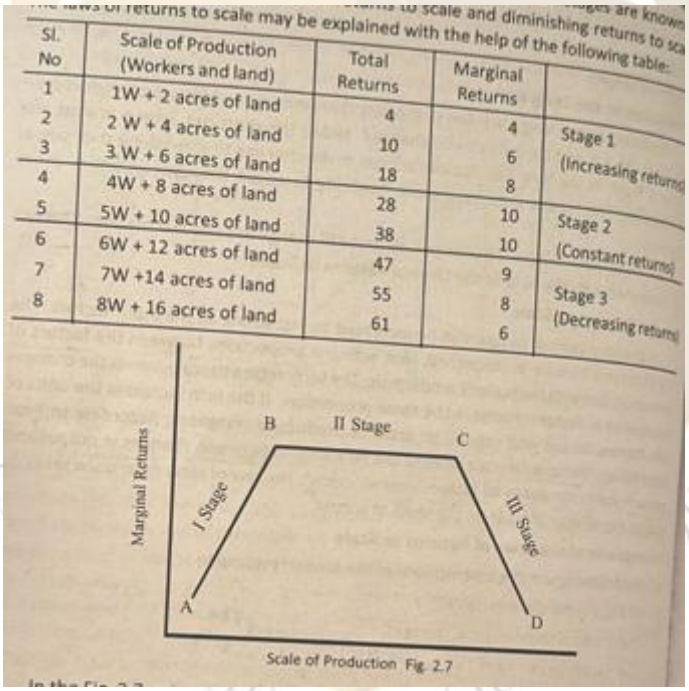
5. A worker works with given tools and implements.

Stages of Returns to Scale

When the scale of production is expanded by increasing all input factors, the effect on output shows three stages or phases. Firstly, returns to scale increase because the increase in total output is more than proportionate to the increase in all inputs. Secondly, returns to scale become constant because the increase in total output is in exact proportion

Business Economic

to the increase in inputs. Lastly returns to scale diminish because the increase in output is less than proportionate to the increase in inputs. These three stages are known a increasing returns to scale, constant returns to scale and diminishing returns to scale The laws of returns to scale may be explained with the help of the following table:



Sl. No	Scale of Production (Workers and land)	Total Returns	Marginal Returns	
1	1W + 2 acres of land	4	4	Stage 1 (Increasing returns)
2	2 W + 4 acres of land	10	6	
3	3 W + 6 acres of land	18	8	
4	4W + 8 acres of land	28	10	Stage 2 (Constant returns)
5	5W + 10 acres of land	38	10	
6	6W + 12 acres of land	47	9	Stage 3 (Decreasing returns)
7	7W +14 acres of land	55	8	
8	8W + 16 acres of land	61	6	

In the Fig. 2.7, returns to scale increases from A to B, remains constant from B to and diminishes from C to D.

Increasing Returns to Scale

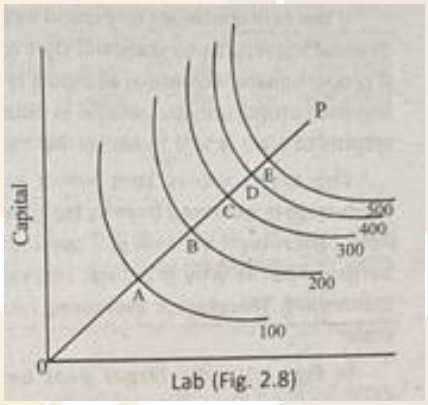
When inputs are increased in a given proportion and output increases in a greater proportion, the returns to scale are said to be increasing. In other words, proportionate increase in all factors of production results in a more than proportionate increase in output, it is a case of increasing returns to scale.

The above table reveals that in the beginning with the scale of production of 1 worker and 2 acres of land, the output (return) is 4. Then the scale of production is doubled (i.e., 2 workers and 4 acres of land). Then the output (10) is more than doubled. When the scale is

trebled (3 workers and 6 acres of land), the output is more than treble. That is why marginal product is increasing from Sl. No.1 to Sl. No 3. This shows that we have increasing returns up to this stage.

If the industry is enjoying increasing returns, then its marginal product increases. As the output expands, marginal costs come down. The price of the product also comes down

In Fig. 2.8, Labour is measured on OX axis, while capital is measured on OY axis. The line OP is drawn passing through origin on the isoquant map. This scale line OP represents different levels of input where the proportion between labour and capital remains constant. The distance between AB, BC, CD and DE are decreasing. The increase in input (scale) is small as we go up the scale and the output is larger. 500 400 300 200 B Output increases more than proportionate increase in input. In other words, in order to get the same increase in output (100 units) lesser and lesser units of input are used. This is a case of increasing returns to scale.

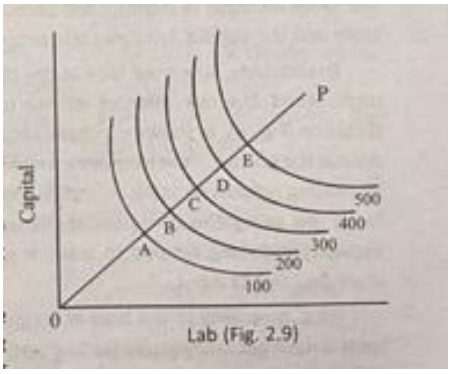


Constant Returns to Scale

When inputs are increased in a given proportion and output increases in the same proportion, constant return to scale is said to prevail.

When scale of production is further increased, marginal product remains constant. From Sl. No. 4 to Sl. No.5 marginal returns remain constant at 10 units. This stage is constant returns to scale.

In case of constant returns to scale the average output remains constant. Constant returns to scale operate when the economies of the large-scale production balance with the diseconomies



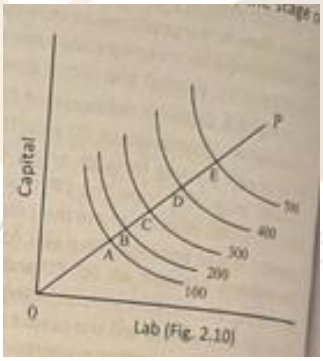
In the Fig. 2.9 (in the previous page), the successive equal product curves (isoquants are equi-distant from each other along with the scale line OP. When AB=BC=CD=DE, W can understand a change in the quantity capital and labour in a certain proportion cause a change in the output in the same proportion. This is a case constant return to scale

Decreasing Returns to Scale

If the firm continues to expand beyond the stage of constant returns, the stage of diminishing returns to scale will start operate.

If proportionate increase in all inputs results in less than proportionate increase in output, the returns to scale is said to be decreasing.

The table shows that when scale of production is increased from Sl. No. 6 to Sl. No. 8 the total returns increase at a lower rate than before. That is why marginal returns start diminishing. This stage is decreasing returns to scale.



In Fig. 2.10, the larger gaps between successive isoquants (equal product curves) indicate the operation of the law of diminishing returns to scale. The distance between AB, BC, CD and DE are increasing. This indicates that the scale (inputs) have to be increased in larger and larger quantities in order to get the same increase in output (100 units). The increase in input is large as we go up the scale and the output increases less proportionately than the increase in input.

To conclude, when we look at the distances of isoquants from one another, we can understand the operation of returns to scale. If the successive isoquants lie at equal distance (Fig. 4), it shows constant returns to scale. It implies that doubling of input double the

output. If the isoquants steadily become closer to each other (Fig. 3), it indicate increasing returns to scale. It implies that doubling of output will require only less than twice the quantities of inputs. If the isoquants lie farther from each other (Fig. 5 shows diminishing returns to scale. It signifies that doubling of output requires mor than doubling of inputs.

Thus, according to the laws of returns to scale, when all input factors are increased total output generally increases at an increasing rate, later at a constant rate and finally aft a diminishing rate. The three stages are not three different laws of returns to scale, but the aspects of one and the same law

CONCEPTS OF REVENUE

Cost and revenue are just like the two sides of the same coin. In modern economics, the equilibrium of the firm is discussed in terms of cost and revenue. Therefore, the term revenue is an important concept in economics.

Meaning and Definition of Revenue

Revenue simply means 'sales receipts'. It is the amount of income, which a firm receives by the sale of its output. Suppose a firm producing ice cream sells 1,000 cups of ice cream during a day at 10 per cup. It gets 10,000 on sale per day. This amount of 10,000 is called revenue. Thus, by selling a commodity whatever money a firm receives is called revenue.

Nature of Revenue

The following characteristics of revenue indicate its nature

1. Monetary Measurement: Revenue is expressed in monetary terms. This makes it easy This makes it easy to quantify and analyze. This helps businesses track their financial performance over time.

2. Primary income source: Revenue is the main source of income for a business. It comes from the sale of products or services.

3. Varies by type of business: Different businesses generate revenue in different ways. For example, a retail store earns revenue through product sales, while a service-based company earns revenue by providing services.

4. Time frame: Revenue is typically measured over specific periods, such as daily, monthly, or annually. This helps businesses assess performance over time and make nece essary adjustments.

5. Impact on profitability: Revenue directly affects a business's profitability. Higher revenue generally leads to higher profits, provided costs are controlled.

6. Recurring or non-recurring: Revenue can be recurring (regular income, like subscriptions) or non-recurring (one-time income, like selling an asset).

Difference between Revenue and Profit

Revenue is different from profit. Profit is the excess of revenue over costs.

Profit = Revenue - Costs

Revenue = Costs + Profit

Concepts of Revenue (Types of Revenue)

Mainly there are four concepts or types of revenue. They are, total revenue, average revenue, marginal revenue and incremental revenue. Here, we discuss total revenue, average revenue, and marginal revenue.

Total Revenue: Total revenue refers to the total sale proceeds of a firm by selling its total output at a given price. It is obtained by multiplying the quantity of commodity sold with the price of the commodity. Mathematically,

$TR = Q \times P$

where, TR = Total Revenue

Q = Quantity of output

P = Price of the commodity

For example, a firm sells 100 units of a product at the price of 10 each, the total revenue will be: 10 * 100 =1,000.

Average Revenue: Average revenue is the revenue earned per unit of output. It is the revenue per unit of the commodity sold. It is obtained by dividing the total revenue by the number of units sold. Mathematically,

$AR = (TR)/Q$

where, AR = Average Revenue

TR = Total Revenue

Q= Quantity sold

In the above example, average revenue = 1000/100 =10. Thus, average revenue is equal to price.

AR Curve and Demand Curve

The consumers' demand curve shows the relation between the price and quantity demanded. It also shows the average revenue or price at which various quantities of s commodity are sold. This is because the price offered by the buyers is revenue from the point of view of the seller. Therefore, consumers' demand curve is same as the seller's

average revenue curve. Thus, demand curve (from the buyers' point of view) and average revenue curve (from the sellers' point of view) are one and the same.

Marginal Revenue: Marginal revenue is the addition to total revenue by selling one more unit of the commodity. It is the change in TR from sale of one more unit of a commodity. It is calculated as below:

$MR_n = TR_n - TR_{n-1}$

Where, MR_n = Marginal revenue of the nth unit

TR_n = Total revenue from n units

TR_{n-1} = Total revenue from (n - 1) units

n = Number of units sold

For example, the total revenue realised from sale of 10 units is 200. When 11 units are sold the total revenue is 220. Then marginal revenue will be:

$MR_{11} = TR_n - TR_{n-1} = TR_{11} - TR_{10} = 220 - 200 = 20$

When change in units sold is more than one, then MR is calculated in the following way:

MR = Change in TR /Change in quantity sold = ▲TR / ▲Q

For example, if revenue realised from sale on 100 units is 1,000 and that from sale of 120 units is 1,180, then marginal revenue will be:

MR= 1180-1000 /120-100 = 180 / 20 = 9

TR is Summation of MR

Total revenue can also be calculated as the sum of marginal revenues of all the units sold. It means,

$TR_n = MR_1 + MR_2 + MR_3 + \ldots\ldots\ldots + MR_n$ or TR = SMR

Incremental Revenue

Incremental revenue simply refers to increase in revenue. It is the difference between the new total revenue and the existing total revenue. It measures the impact of decision alternatives on the total revenue. The formula for measuring incremental revenue is as follows:

$IR = R_2 - R_1$

where, IR = Incremental revenue

R_2 = New total revenue

R_1= Old or existing total revenue

Suppose the present volume of production is 50,000 units and the selling price is 3. The existing total revenue is 1,50,000 (i.e., 50,000 x 3). Suppose the firm has decided to increase the production to 75,000 units. The firm expects that the 75,000 units can be sold at a price of 2.50. Then then total revenue (new) would be 1,87,500 (i.e., 75,000 x 2.5). In this case the incremental revenue would be 37,500 (i.e., 1,87,500-1,50,000). As a result of the decision taken to increase the production from 50,000 units to 75,000 units, there is an increase in the total measure by 37,500. This is the incremental revenue. It may be noted that incremental revenue will result not from change in price alone but from any decision alternative.

Relationship between Revenue Concepts

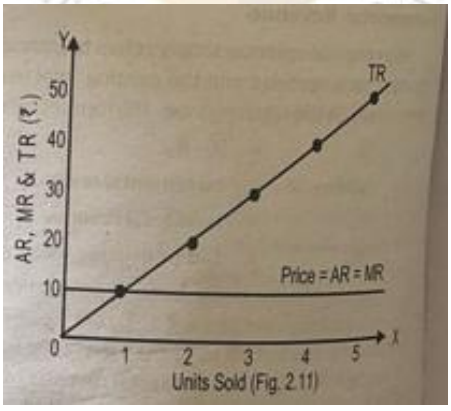
Different revenue concepts and revenue curves may be discussed under two situations:

(a) when price remains constant, and (b) when price falls with rise in output.

(a) When price remains constant: This happens under perfect competition. In this situation, firm has to accept the same price as determined by the industry. This means any quantity can be sold at that particular price. In this case, AR will be equal to MR AR, MR, & TR Curves (When Price remains Constant)

From the following schedule and diagram, we can understand the relationship between AR and MR.

Units sold	Price/AR (₹)	TR (₹)	MR (₹)
1	10	10	10
2	10	20	10
3	10	30	10
4	10	40	10
5	10	50	10



The above values may be plotted in the graph (Fig. 2.11):

Price (AR) is same at all levels of output. Both AR and MR curves coincide in a horizontal straight line parallel to the X-axis. Price or AR curve is the demand curve. This is because, at the same price, different quantities are demanded (by buyers). Thus, demand is perfectly elastic. In short, when the price is same, Price = Demand = AR = MR

Since MR remains constant, TR increases at a constant rate. Hence, TR curve (straight line) rises upwards from left to right. TR curve starts from the origin. This is because at zero level of output, TR is zero

(b) When price falls with rise in output: This happens under imperfect competition. this situation, firm follows its own price policy. The firm can increase sale only by reducing the price.

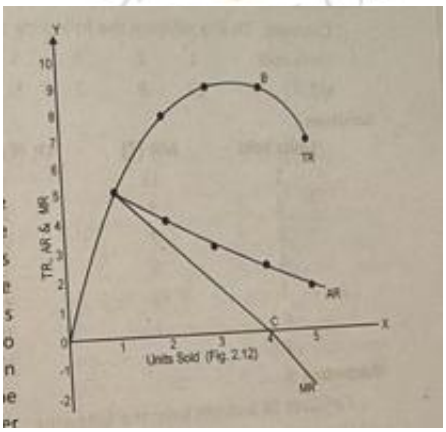
AR, MR, and TR Curves (When Price Falls with Rise in Output)

Under imperfect competitive market, firms can increase their sales only by reducing the price. In such a situation, AR will fall with increase in sale. It means, revenue from every

additional unit (i.e., MR) will also fall and it will be less than AR. Thus, both AR and MR curves slope downwards from left to right. Look at the following schedule and diagram:

Units sold	AR/Price	TR	MR
1	5	5	5
2	4	8	3
3	3	9	1
4	2.25	9	0
5	1.40	7	-2

The above schedule (given on the previous page) shows that both MR and AR fall as output increases. MR falls at a rate higher than the rate of fall in AR. The above values may be plotted in the diagram (Fig. 2.12) shown below:



In the graph (Fig. 2.12), we can see that both AR curve and MR curve slope downwards from left to right. MR curve is steeper than the AR curve. This is because MR is limited to one unit, while AR is derived by all the units. This leads to comparatively lesser fall in AR than fall in MR. It may be noted that MR curve can be zero and negative, while AR can be neither zero nor negative because TR is always positive.

In the schedule we can see that TR is increasing. It continues to increase till MR is positive. TR will be maximum when MR is zero. When MR is negative, TR will fall. TR curve rises as long as MR is positive. It reaches its highest point B when MR is zero at point C. It starts declining when MR becomes negative.

CHAPTER – 3

PROFIT MAXIMISATION IN DIFFERENT MARKET STRUCTURES

Buyers and sellers interact with each other and determine price of goods. It is very important to know the place where they come together and agree on the price. This place is known as market.

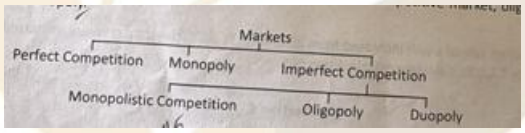
Meaning of Market

In ordinary language the term 'market' means a place where goods are bought and sold. But in economics the term market is used in a broader sense. In economics, market is the arrangement that brings buyers and sellers together to agree on the price and settle sale and purchase of goods and services. In the words of Duddy. "Markets are people with money to spend and desire to spend it."

Kinds of Market

There are various kinds of markets. Markets can be classified in many ways. In Economics the most important classification is based on nature of competition.

According to nature of competition, markets can be broadly classified into perfect competitive market, monopoly market and imperfect competitive market. Imperfect competitive market is again classified into monopolistic competitive market, oligopoly and duopoly



Perfect Competition

Perfect competition is the market situation in which there are a large number of buyers and sellers of a homogeneous product. The price of the product is determined by the market forces of demand and supply. All the firms sell their products at this market price. Thus, there is only one price that prevails in the market.

Features of Perfect Competition

Perfect competition is characterised by the following features:

1. There are a large number of buyers and sellers.

2. All firms produce and sell homogeneous or identical products.

3. Only one price (same price) prevails in the market.

4. Every firm is free to enter or leave industry. All the firms are collectively known as industry.

5. All the buyers and sellers have perfect knowledge about the market conditions.

6. All the factors of production are free to move to any industry, i.e., they are mobile.

7. There are no selling and transportation costs.

Since there are large number of buyers and sellers, each seller sells only a small portion of the total quantity traded. Therefore, a single seller cannot influence the market price. Buyers and sellers have no control over the price. They accept the price set by the market or industry. Thus firms are just price takers. In short, the price of the product throughout the market will be the same. There is no competition among the firms. This type of market does not exist anywhere in the world.

Profit Maximisation

The main aim of every from producing and selling goods is to maximise its profit. When a firm achieves maximum profit, it is said to be in equilibrium. After reaching such a position, there will be no incentive for the firm (producer) to increase or decrease the output.

Profit is denoted by p. Thus, profit is algebraically expressed as below:

p=TR-TC

The difference between TR and TC is the firm's profit. A firm has to find out by selling how much quantity (q) it will get maximum profit. To get maximum profit (or to reach equilibrium), the following three conditions must be fulfilled:

1. The marginal cost (MC) must be equal to the marginal revenue (MR). HR=MC

2. The MC should be rising when MC= MR. In other words, the MC curve must cut MR curve from below.

3. In the short run AR (or price) must be greater than the average variable cost (i.e., AR > AVC). In the long run AR (or price) must be greater than the long run average cost (i.e., AR > LAC) It is only when these conditions are satisfied that the difference between TR and TC (i.e., profit) is maximised.

These conditions of equilibrium may be examined in detail.

Condition 1

As output increases, both TR and TC increase. As long as the change in TR is greater than the change in TC, profit will continue to increase. In other words, as long as MR is greater than MC, profit is increasing. Profit will be maximum at the level of output at which MC = MR

Let us examine the firm's equilibrium with the help of the following table:

Units of output (Q)	MR (₹)	MC (₹)
1	10	13
2	10	11
3	10	10
4	10	9
5	10	8
6	10	6
7	10	8
8	**10**	**10**
9	10	12

In the above table, MC = MR in two situations- (i) when 3 units of output are produced, and (ii) when 8 units of output are produced. However, in situation 1 (when output is 3 units) even though MC = MR it is not the equilibrium point (or profit maximisation point). Here first condition is satisfied. Here MC is falling and not rising. Thus, at the level of output 3, profit is not maximum. This is because the second condition is not satisfied.

In situation 2 (when 8 units of output are produced) MC becomes equal to MR. First condition is satisfied. Let us see whether second condition is satisfied. At the level of output of 8 units, the MC is rising. Thus the second condition also is satisfied. Hence, the level of output of 8 is the equilibrium.

It may be noted that total marginal cost will be the total variable cost (TVC). Similarly, total marginal revenue will be the total revenue (TR). When MC is falling, it will increase the difference between TR and TVC. That is, profit tends to rise in a situation of falling MC. When MC is falling, the firm should not stop production. This is because the profit will not be maximum. Suppose the producer stops production when MC is falling. Then he will lose revenue and profit that is likely to be obtained when expanding output up to the level where MC is rising. It is only when MC is rising that a producer (firm) will attain his equilibrium. Thus, equilibrium is attained when MC = MR = 10 and MC is rising (both conditions are satisfied). In short, the producer will maximise profits when 8 units of output are produced. Let us illustrate this point further.

Situation 1 (When Output = 3 and MC = MR and MC is Falling)

TR = SMR = 10 + 10 + 10 = 30

TVC = SMC

TVC13+11+10=34

p = TR - TVC = 30 - 34 = - 4

Situation 2 (When Output = 8 and MC = MR and MC is Rising)

TR = SMR

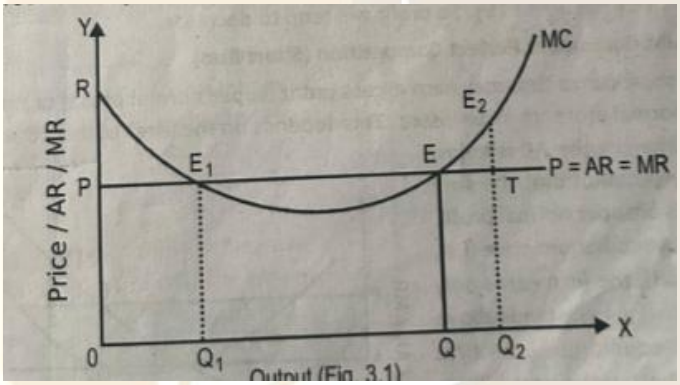
= 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = 80

TVC=13+11+10+9+8+6+8+10=75

p = TR - TC = 80 - 75 = 5

If output is increased beyond 8 units, profit will reduce. Thus, if 9 units of output are produced, SMR = 80+10=90, while SMC = 75+12=87, so that p = TR - TVC = 90 - 87 = 3. This is less than 5 when output = 8. Similarly, if only 6 units of output are produced, SMR% = 60, while SMC = 57. So, p = 60 - 57 = 3 Thus, the maximum profit (5) is attained when 8 units of output are produced.

The producer's equilibrium can be studied with the help of a diagram:



Output (Fig. 3.1)

In Fig. 3.1 the price, AR and MR are indicated by the horizontal line parallel to the X-axis, MC curve is U-shaped as usual. MC = MR in two situations: (i) at point Q_1 when output OQ_1 and (ii) at point Q when output is OQ. In situation 1MC = MR and MC is falling, MC curve is cutting the MR curve from above. Hence, E_1 not the equilibrium

point. This is the situation of loss (up to point E_1, MC is higher than MR), OQ_1 output, the producer has been incurring loss. In situation MC = MR and MC is rising, Le, MC curve is cutting the MR curve from below. Hence, E is the equilibrium point, it is at point E profit is maximum. At output OQ, the profit is maximum (up to the point E the MC below MR). At this point, TR Area under MR curve corresponding to a given level of output. This is equal to OQ_2E_1P in situation 1. Likewise, TVC = Area under MC corresponding to a given output. This is equal to OQ_1E_1 R in situation 1.

We can see that area OQ_1E_1 R (ie, TVC) greater than the area $OQ1E_1P$ (ie, TR). This is a situation of loss to the increasing the output OQ_1 the producer can eliminate the loss.

Corresponding to situation 2, when MC-MR and MC is rising at point E, we find that

TR = OQEP, and

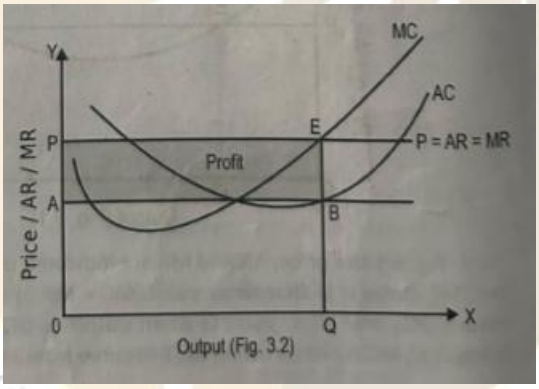
TVC = OQER

TR > TVC

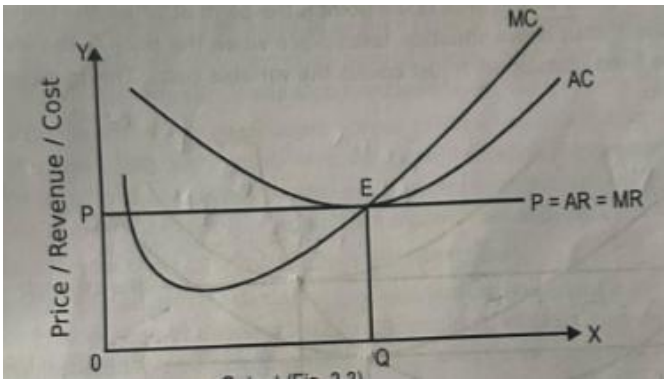
The difference between TR and TVC is maximum at profit E. Any output level below or above point E would mean lesser profits. Beyond output OQ the producer with incur loss. This is because beyond the point E, MC is higher than MR. Suppose OQ_2 units of output are produced. In such a situation, addition to TR = Area QQ_2TE. Addition to TVC Area OQ_2E_2E Addition to TVC is greater than addition to TR. Additional TVC exceeds additional TR by the area ETE_2. So profit will tend to decrease.

Firm's Equilibrium under Perfect Competition (Short Run)

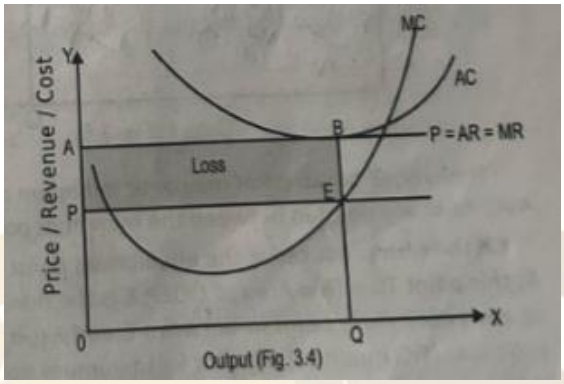
In the short run, a firm may earn excess profit (super normal profit) or no profit no loss (only normal profit) or incur losses. This depends on the level of the AC at the short run equilibrium. If the AC is below the price at equilibrium, the firm earns excess or super normal profit. If the AC is at equilibrium price (ie., AC = AR = MRI the firm earns only normal profit. If the AC stands above the price of equilibrium, the firm incurs loss. These three possibilities may be studied with the help of diagrams.



In Fig. 3.2, the equilibrium is attained at point E, where MC = MR and MC curve cuts the MR curve from below. Thus, OQ is the equilibrium output and OP is the equilibrium price. Here TR = Area of OQEP, TC = Area of OQBA. So profit = TR-TC = Area of OQEP - Area of OQBA Area of ABEP = Super normal profit.



In Fig. 3.3 (given on the next page), the equilibrium is attained at point E where MC = MR and MC curve cuts the MR curve from below. Thus, OQ is the equilibrium output and OP is the equilibrium price. In this diagram, TR = TC = Area of OQEP, That is, AC stands at the equilibrium point E. To be more clearly, at equilibrium point E, AR = AC. Profit = TR-TC= Area of OQEP - Area of OQEP = Zero. Hence the firm earns only normal profit.



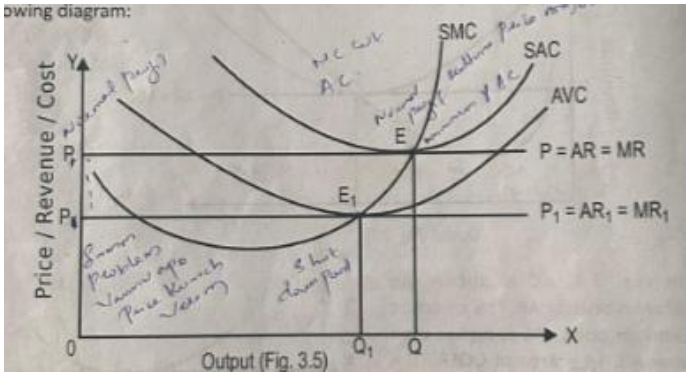
In Fig. 3.4, AC is above the equilibrium price or AR. This means at equilibrium point, AC is higher than price or AR. TR = Area of OQEP, TC = Area of OQBA. Profit = TR-TC = Area of TR-Area of TC = Area of OQEP - Area of OQBA Area of PEBA Negative profit because area of OQBA > Area of OQEP. That is, area of TC is greater than the area of TR. Thus, the firm incurs a loss (the area of PEBA),

Shut Down Point

An important question arises as to how long the firm will continue to produce when the firm is incurring loss. During the short period the fixed cost is unavoidable. Even if the production stops temporarily, the firm will have to incur fixed cost. Fixed cost is not relevant for decision making. Hence, the firm will continue to produce if it covers at least its variable cost. This is the third condition of equilibrium.

The third condition of equilibrium that AR (price) AVC should also be satisfied. We know that no producer would undertake production if the price or AR is not covering the AVC. If the firm's price or AR is not able to cover at least its AVC, the firm will shut down (close down) its production. If it is shut down, the firm can minimise the losses.

The minimum point of AVC curve at which the firm covers its variable cost is called shut down point. In other words, shut down point is the point at which the firm stops its production. In short, shut down situation takes place when the price is too low that it cannot cover the fixed costs at all. It just covers the variable costs. This is shown in the following diagram:



Here, equilibrium point may be at minimum point of AC, or at the minimum point of AVC, or at any point in between the minimum points of AC and AVC curves.

If the firm produces at the equilibrium point E (OQ quantity) it earns normal profit. At this point TC = TR = Area of OQEP, E is the minimum point of AC. If the firm produces at any equilibrium point in between. E and E_1, it covers a part of fixed cost. If the firm produces (OQ quantity) at point E_1 (minimum point of AVC) the firm has to incur (bear) the entire fixed cost. If the firm stops its product ion at point E_1 it will have to pay the entire fixed cost. This is the shutdown point (E_1) Even if the firm is shut down, it has to incur the entire fixed cost. So the firm can continue the production to exist in the industry with the hope of future profit. However, if the price falls below OP_1 the firm has to shut down or close down its production. This is because it has to pay a part of its variable cost in addition to the entire fixed cost. That is, the loss will be huge. So the firm never produces at the price below OP corresponding to the minimum point AVC. So, E_1 is called the shutdown point. At this point, the firm can minimise losses. At the shutdown point, the loss is limited to total fixed cost in short, in the short run, the price should be greater stan or equal to AVC

Here, it is essential to understand two terms, namely, normal profit and super normal profit.

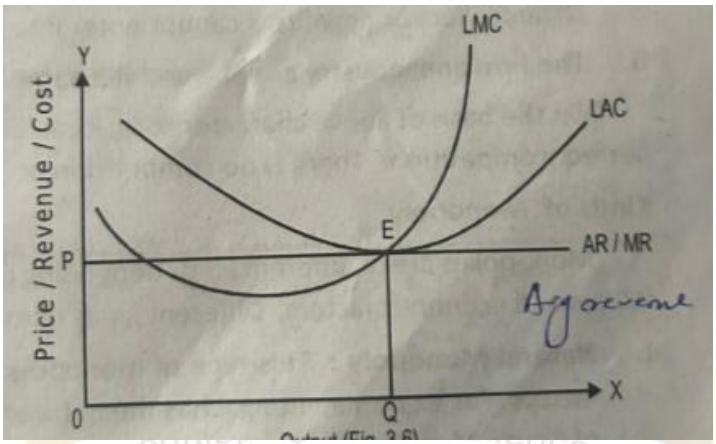
Normal profit: A firm earns normal profit when its AR is equal to AC. Normal profit is the level of profit which is just enough to cover the explicit cost and opportunity cost. It is the minimum profit that a firm earns in order to stay in the industry. In the short run, a firm may earn profit which is less than normal profit. Even then the production may continue. But in the long run, it will stop production.

Super normal profit: A firm earns super normal profit when its AR is higher than AC. The profit that a firm earns over and above normal profit is called super normal profit. In the short run some firms earn super normal profit, some firms earn normal profit and some firms make losses. But in the long run all firms earn normal profit

Firm's Equilibrium Under Perfect Competition (Long Run)

As already stated, the third condition of equilibrium (long run) is that the price or AR should be greater than or equal to LAC. In the long run, all costs are variable (there is no difference

between fixed cost and variable cost). So AVC is not relevant in the long run. In the long run what is relevant is LAC.



Let us examine the producer's equilibrium under perfect competition in long run with the help of a graph (Fig. 3.6).

In the Fig. 3.6, E is the equilibrium point where LMC and LAC are equal to price or AR. As price is just equal to AC, the firm earns only normal profit. At this level of output, LAC is at the minimum. If MR > LMC the firm will produce more till Q. If LMC > MR, the firm will produce less to minimise loss. After equilibrium we can see that LMC increases. At equilibrium point E, the firm earns only normal profit (because price is equal to LAC). Here the 3rd condition also is satisfied. The third condition is that the price or AR should be greater than or equal to LAC

If the price falls below OP, the firm will incur loss. Hence, it will stop production and shut down the unit.

Monopoly

Monopoly as a form of market structure has emerged in all the capitalist economies, The perfect competitive markets in capitalist economies now disappeared.

Meaning of Monopoly

The word monopoly comes from the two Greek words 'mono' and 'poly'. Mono means single and poly means selling. These two mean 'alone to sell'. Thus monopoly is a market situation in which there is only one seller or producer of a product for which there is no close substitute. He controls the whole supply of a particular product. He has complete control over the price also. He is a price maker. He tries to fix the price that will maximise his profit. He is the firm. He constitutes the industry also. Hence under monopoly, there is no distinction between firm and industry. In other words, the firm and industry are one and the same.In short, monopoly is a market in which a single seller sells a product or service which has no substitute.

Features of Monopoly

The main features of monopoly are:

1. There is only one seller of a product.

2. The product has no close substitute.

3. The entire market is under the control of the single seller.

4. The monopolist fixes the price for the commodity. He is the price maker and not price taker.

5. Other sellers or new firms cannot enter into the market easily.

6. The firm and industry are one and the same.

On the basis of above characteristics, it can be said that monopoly is the opposite of perfect competition. There is no competition at all.

Kinds of Monopoly

Monopolies are of different kinds depending upon natural factors, legal factors, social factors and economic factors. Different kinds of monopoly may be explained as follows:

1. Natural Monopoly: This type of monopoly exists due to the existence of natural factors. For example, Bengal has the natural monopoly of jute. De Beers company of South Africa has monopoly of diamonds.

2. Legal Monopoly: Some monopolies are created by the laws of the country in the public interest. These are called legal monopolies.

3. Social monopolies: These are owned and managed by the government. Their aim is not to make maximum profit. These are also known as public monopolies. In India, railways, posts, telegraphs, etc. are public monopolies.

4. Voluntary monopolies: These are monopolies created voluntarily by the person concerned or by the firms concerned. These are in the form of trusts, cartels, holding companies, syndicates etc. For instance ACC is a voluntary monopoly created to eliminate competition and to have greater profits by fixing a high price of the cement.

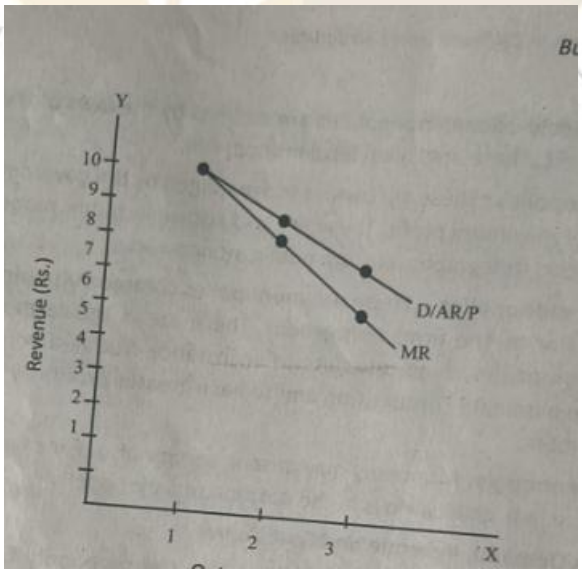
5. Service monopoly: Monopoly may arise in service also. For example, there is only one doctor in a locality. He is in the position of a monopolist.

Monopolist's Demand, Revenue and Cost Curves

Since there is only one firm in the industry the monopoly firm constitutes the whole industry also. Therefore, the demand curve of the monopolist would be the same as the demand curve of the industry. This demand curve is downward sloping.

This is so because the monopoly firm can sell more at lower prices and less at higher prices. The demand curve is also the average revenue curve for the monopolist. When AR curve slopes downwards the MR curve also slopes downwards but it lies below the AR curve. This means the MR curve declines at a higher rate than the AR or demand curve. Why does it happen? Each additional unit sold adds less to total revenue than the price received for it, because the firm has to reduce the price on all units to sell additional units. For example, to sell 2 units instead of one, say, a firm must reduce the price from 10 to 9 on all 2 units. Thus, while the second unit sells for 9, it adds only 8 to total revenue. If it wants to sell one more unit, it has to reduce the price to 8 on all units. It adds only 6 to total revenue. That is total revenue at 2 units is 18 (2 x 9) and at 3 units, it is 24 (3 x 8). The additional revenue (marginal revenue) from selling one more unit is 6 (i.e., 24-18). Thus MR. (6) is below AR (8). Let us look at the following chart and diagram.

Output (Q)	Price (P)	Total Revenue (Q x P)	AR (TR ÷ Q)	MR
1	10	10	10	10
2	9	18	9	8
3	8	24	8	6



It is clear from the above chart and diagram (given in the next page) that under monopoly: (a) demand, average revenue and price are one and the same, (b) AR curve and MR curve

both are separate and are downward sloping; and (c) MR curve lies below AR curve (MR is less than AR).

It should be noted that a monopoly has no supply curve. This is so because the quantity supplied at any one price depends on demand. Therefore the firm chooses the price quantity combination along its demand curve that maximises its profit.

The average cost curve of the monopoly firm is generally flattened U-shape as in perfect competition. This is so because the costs of production are governed by the Laws of Returns.

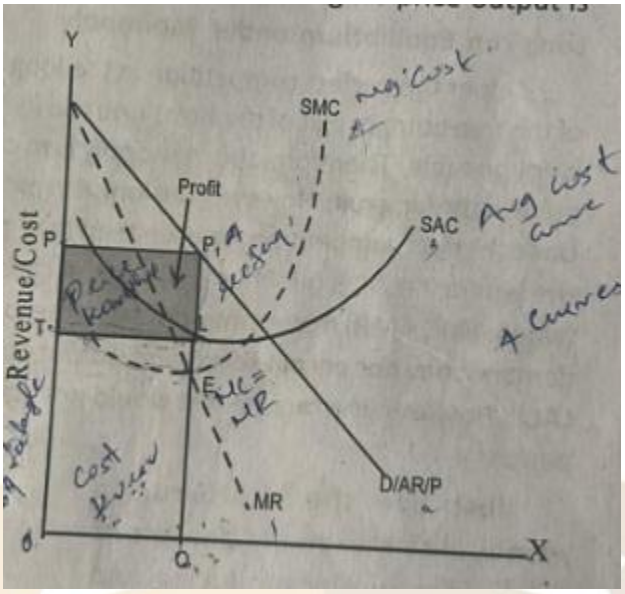
Price and Output Determination under Monopoly

Under perfect competition, the firm is a price taker. It means that the firm does not fix the price. It determines its output according to the price fixed by the industry. But a monopolist firm has to fix the price as well as output. It fixes the price and output in such a way as to get maximum profit. The monopoly firm reaches its equilibrium or earns maximum profit only when its MC = MR. Besides, MC curve should cut MR curve from below. Now let us see how a monopoly firm determines price and output in order to get maximum profit.

Short run Equilibrium under Monopoly

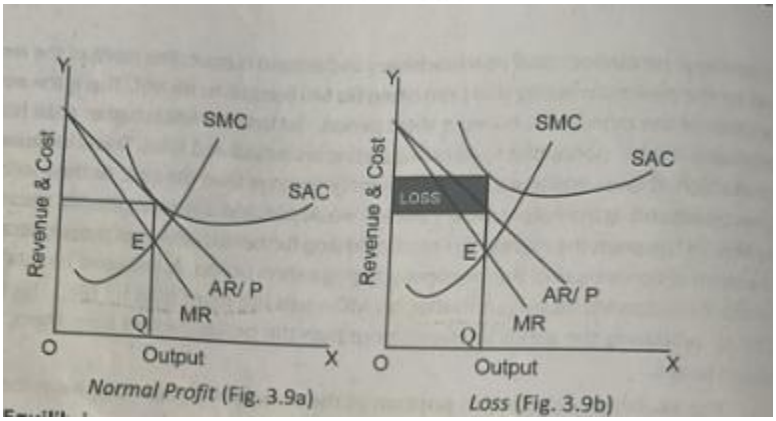
During short run a monopolist can increase his output only with the existing plant and machinery. He cannot install new machinery and expand output. The profit of the monopolist will be the maximum during short run when his MC is equal to his MR. This is the equilibrium position of the monopolist during a short period. So long his MR is higher than his MC, it is profitable for the monopolist to go on expanding his output and sales. This is because with the production of every additional unit he gets more revenue than the cost. As the monopoly firm goes on expanding the output, slowly the MC would rise, and ultimately the MC becomes equal to MR. At this point the monopoly firm should stop further expansion of output because this is the point of equilibrium of the monopolist during a short period. At this point he gets maximum profit. If he expands his output further, his MC would rise more than his MR. This means the cost of producing the goods increases more than the profits derived from them, and so he incurs losses.

The short run equilibrium position of the monopolist regarding his price-output is shown in the following diagram (Fig. 3.8)



In the Fig. 3.8, AR is the demand or average revenue curve. MR is the marginal revenue curve which is falling below the AR curve. SAC is the short run average cost curve. SMC is the short run MC curve. It can be seen from the diagram that up to OQ output MR is more than MC. But beyond OQ, MR is less than MC. Therefore the monopolist will be in equilibrium at output OQ at which MR = MC and the profit is the maximum. At OQ output, the price is QP, (or OP), P, touches the price line (ie.. AR curve). QL is the average cost. So the price minus cost is the profit. Hence P, Lis the profit per unit. The total profit will be P_1LxOQ = P_1x TL = P_1LTP which is shown as the shaded portion in the Fig.3.8. Total profit = Profit per unit x OQ units sold. This is the short run equilibrium of the monopolist.

A monopolist need not always earn super normal profit in the short run. He may make normal profit. He may even incur loss. As put by Benham "The fortunate monopolist can fix what price he chooses. But if he cannot sell enough, he doesn't gain, he loses". If the equilibrium price (AR) is above AC, the firm makes super normal profit. If the price is equal to AC, it makes normal profit. If the price is less than AC, the firm incurs loss. The aim of the monopolist is to maximise profits or minimise losses. These situations are shown in the following diagrams:



Long run Equilibrium under Monopoly

Under the perfect competition in the long period a firm gets only normal profit because of the free entry or exit of the firms into the industry. But under monopoly entry of new firm is not possible. Therefore, the monopoly firm can easily protect its short period super normal profit in the long run. However, the long run profit will depend upon the firm's cost conditions. Under perfect competition we have seen that in the long run every firm would be of optimum size where its LAC is minimum. But in the case of monopoly, the equilibrium level of output (where LMC= MR) may or may not have the lowest LAC. This is because the size of market or demand may not permit to expand output to produce it at the minimum cost per unit (i.e., LAC). However, the monopolist would not stay in the business if he makes losses in the long period.

Just like the short run a monopolist maximises the profit under long-run by producing and selling that output at which MR =LMC. The long run equilibrium of the firm will be at the output where the long run marginal cost curve (LMC) intersects the long run marginal revenue curve (MR). The price and output determination in the long run under monopoly (Long run equilibrium under monopoly) is illustrated in the diagram (Fig. 3.10).

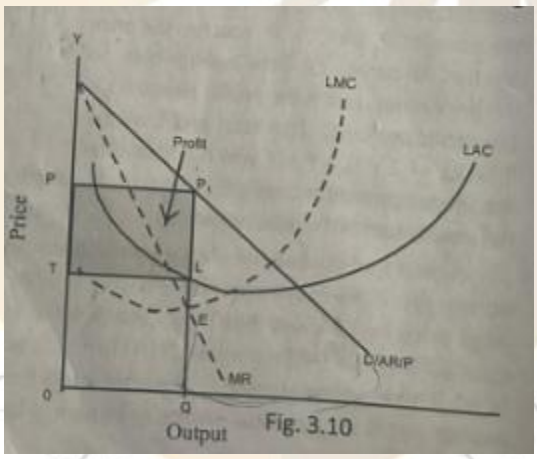


Fig. 3.10

in the diagram (Fig. 3.10) LMC is long run marginal cost curve. LAC is the long run average cost curve. AR is the average revenue or demand curve. MR is the long run marginal revenue curve. The firm is in equilibrium at point E where LMC MR and LMC curve cuts MR curve from below. Hence equilibrium output is OQ and equilibrium price is OP (or QP_1). Since the price per unit (AR) QP_1 is greater than the cost per unit (LAC), LP_1 is the super normal profit per unit. The super normal profit is equal to P_1 LTP. Thus under long run monopoly the firm sells OQ quantity (where LMC = MR) at OP) price so as to get maximum profit. QP_1

In the long run, if the cost is at an increasing trend, the firm will fix a higher price and sell a lesser quantity to make maximum profit. If the cost is decreasing, it will fix a lower price and sell more to increase profit. If the demand is inelastic, it will fix a high price. If the demand is relatively elastic it will fix a lower price to increase sales and profit.

Is Monopoly Price Necessarily a High Price?

Normally the monopoly price is a higher price when compared with price under perfect competition. But this is not always true. A monopoly firm need not spend much amount on advertisement. A monopolist produces on a large scale and enjoys all the internal and external economies. He is afraid of public opinion. He is afraid of substitutes (competitors) and the government interference. Because of these, he is in a position to charge a lower price than under perfect competition or imperfect competition. This is true theoretically. But in practice we always see that the monopoly prices are higher than prices under perfect competition. A monopolist is the only producer and seller of his product. He has complete control over the supply of his product. He always wants to maximise his profits. Therefore, he will fix higher prices.

Arguments Against Monopoly (Case Against Monopoly)

The arguments against monopoly are as follows:

1. Monopoly Promotes inefficiency: Monopoly is often considered to be bad. The major objection to monopoly is that it causes economic inefficiency. It leads to a lower output and to higher prices than would exist under perfect competition.

2. Welfare loss in monopoly: In addition to the monopolist producing lower levels of output at higher prices, the monopolist produces at an output where the price Pm (monopoly price) is greater than MCm (Marginal cost of monopoly). This means the value of the last unit produced by the monopolist (Pm) is greater than the cost (MCm). So from society's point of view the monopolist is producing too little output.

3. Monopoly results in concentration of economic power: Monopoly leads to concentration of economic power because the monopolist controls substantial quantities of input and outputs. Some think that the biggest itself is bad in a democratic society for reasons relating to equity, justice and quality.

4. Monopoly retards innovation: It is also argued that lack of competition tends to retard technological advance. The monopolist becomes comfortable, earning his monopolists profits so he does not work hard for product improvement, advanced technology to promote efficiency, etc.

5. Unfair practices: Monopolies tend to corrupt the t financial resources and powerful position they are able to bribe legislators and bring pressure on them to pass such laws as are favourable to them. They even bribe the judges to pass the judgements in their own favour

Comparison between Perfect Competition and Monopoly

Monopoly and perfect competition are the opposite of each other. The following are the important differences between perfect competition and monopoly:

Perfect Competition	Monopoly
1. Many sellers	1. Single seller
2. Individual seller has no control over	2. Complete control over the market supply
3. Product is homogeneous	3. Product has no close substitute
4. Entry is free and easy	4. Entry is blocked
5. Perfect competition	5. No competition
6. Uniform price	6. Different prices in discriminating monopoly
7. Industry is composed of all the firms producing homogeneous product.	7. Firm itself is the industry.
8. Average revenue curve is parallel to ox-axis	8. Average revenue curve slopes downwards from left to right
9. AR and MR are equal to each other	9. MR curve is always below AR curve
10. Seller can sell any quantity of output at the prevailing price	10. Seller can sell additional units only by reducing the price
11. When the firms earn normal profits, industry attains equilibrium	11. Monopoly firm is the industry which attains equilibrium either with abnormal profit or abnormal loss
12. Firm earns abnormal profits only in the short-run	12. Firm enjoys abnormal profits in short-run and long-run

Monopolistic Competition

In the real world there is neither perfect competition nor pure monopoly. Both perfect competition and monopoly are purely imaginary situations, Perfect competition is a myth while monopoly is short lived. In the real world we can see a combination of monopoly and competition. This situation is technically known as imperfect competition. There are three forms of imperfect competition-monopolistic competition, oligopoly and duopoly.

Meaning of Monopolistic Competition

The term monopolistic competition was coined by Prof. E. H. Chamberlin of America. Monopolistic competition refers to a market situation in which competition is imperfect. It is a market structure in which relatively many firms supply a similar but differentiated product, with each firm having a limited degree of control over price.

Under monopolistic competition, the goods produced by different sellers are not homogeneous as under perfect competition, but they are differentiated by several brands

and trade marks. For example, there are different brands of soaps like - Pears, Rexona, Santoor, Lux, Liril, Hamam, Medimix, Mysore Sandal, Nirma etc. Every producer and seller of these brands is a monopolist to some extent because of different brands. At the same fime there is a competition among the producers and sellers because all the brands are close substitutes. Thus monopolistic competition is a combination of both the perfect competition and monopoly. In short, it is the market situation in between perfect competition and monopoly.

Features of Monopolistic Competition

Important features of monopolistic competition are as follows:

1. Large number of producers: Under monopolistic competition, there are a large number of sellers or firms (25, 40, 50 or 70). But this number is not so large as under perfect competition.

2. Product differentiation: This is the most important characteristic of monopolistic competition. The products of different firms are differentiated on the basis of brands. For example, there are a large number of tooth pastes produced by different producers under different brand names like Colgate, Promise, Pepsodent, Close up, Cibaca, Forehance etc. Product of each firm is differentiated from the products of every firm in the market. By differentiation each seller tries to show that his product is different and better than those of competitors. In the eyes of consumers the products are different. Differentiation is done by using different brand names, trade marks, packing, colour, design etc. Due to product differentiation different producers sell their products at different prices. Thus each firm fixes its own output and its own price.

3. Free entry and exit of firms: New firms are free to enter into markets and old firms are free to go out of market.

4. Important role of selling costs: Under monopolistic competition advertisement and selling costs play an important role. Every producer has to face severe competition from other producers. Firms will have to spend large amount on advertisement and sales promotion to promote sales and profit.

5. No combination of all firms: Under monopolistic competition, though there are several firms competing with one another in selling the differentiated products, these firms do not come together into a combination in the form of industry. Chamberlin used the term "Group" to denote the collection of firms producing unidentical but close substitute products. For example, all firms producing soap constitute 'soap group' instead of 'soap industry'.

6. More elastic demand: In the absence of product differentiation the demand curve of the firm will be perfectly elastic like the demand curve of a perfectly competitive firm. But due to product differentiation, the firm enjoys some monopoly power. Therefore, demand curve will be more elastic and thus downward sloping. But it is less steep as compared to that of monopoly firm.

7. Non price competition: Under monopolistic competition, the competition is generally non-price competition. Different producers sell their products at different prices but they compete with each other on the basis of quality, colour, packing, design etc.

8. Lack of perfect knowledge of the market: There are innumerable products each being a close substitute of the other. Hence, the buyers do not know about all these products, their qualities and prices

Difference between Imperfect Competition and Monopolistic Competition

The two terms "imperfect competition" and "monopolistic competition" are not synonymous. Hence they cannot be interchangeably used. Imperfect competition is a much wider and more comprehensive term than monopolistic competition. In fact, monopolistic competition is only one of the many subcategories of imperfect competition.

Therefore, monopolistic competition cannot be equated with imperfect competition.

Demand or AR Curve under Monopolistic Competition

The demand curve or AR curve under monopolistic competition is neither horizontal nor identical to the demand curve as in the case of monopoly. It stands a midway between these. This implies that the demand curve under monopolistic competition is flatter than that under monopoly. The reasons for this are: (a) there are fewer firms than in perfect competition (there are a large number of firms under perfect competition and only one firm under monopoly), (b) the products are not homogeneous but differentiated and hence firms enjoy some monopoly, (c) there is some degree of competition because the products are close substitutes. Thus the demand or AR curve is downward sloping. Hence MR curve also slopes downward, but lies below demand or AR curve. This implies. that a firm will be able to sell more by lowering its price. Thus the firms under monopolistic competition enjoy some control over market supply and price. Look at the given graph (Fig. 3.11)

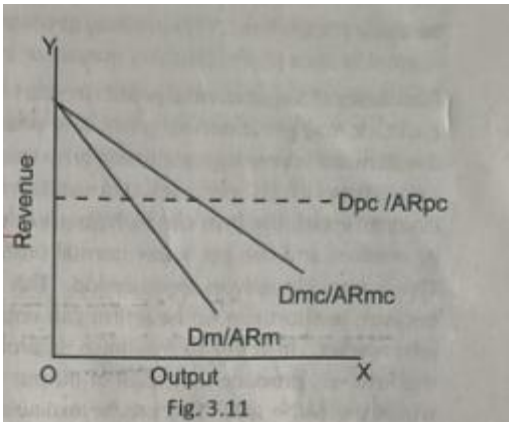


Fig. 3.11

Dpc/ARpc represents the demand or AR curve under perfect competition. Dmc/ARmc stands for the demand or AR curve under monopolistic competition. Dm/ARm refers to demand or AR curve under monopoly. Thus it is clear from the graph that the D/AR curve under monopolistic competition is flatter than that under monopoly. Thus monopolistic competition lies in between perfect competition and monopoly. X

Note: The D/AR curves under 3 different market situations are shown in one graph. Though it is logically and scientifically wrong, it is done so for better understanding

Price-Output Determination under Monopolistic Competition

Under monopolistic competition, it is impossible to present the analysis of the industry in graphic terms. There are two reasons for this. The first reason is product differentiation. The second reason is that no single price prevails for the differentiated products. Moreover, we use the term 'group' for the collection of firms instead of 'industry'. Therefore, under monopolistic competition we shall study the graphic analysis relating to individual firms.

Under monopolistic competition, price is determined on the basis of same principles under which it is determined under perfect competition and monopoly. In other words, under monopolistic competition also, price is determined at the point at which MR and MC are equal, because at this point the firm is in a position to get maximum profit.

Short-Run Equilibrium of a Firm

Short period equilibrium of a firm under monopolistic competition is very similar to that of a monopolist. Here the firm produces a differentiated product and enjoys some degree of monopoly power. In short period, the firm does not have time to change its scale of plant and no new firm will enter the market. Therefore, in short run there may be three possibilities: (1) Firm may get super normal (abnormal) profit, (ii) Firm may get normal or zero profit, (ii) Firm may incur loss.

Possibility of Super normal profit: In short run a firm may be in a position to get abnormal profit. It may get abnormal profit only when the demand is very high and there is no close substitute of its product. Under these circumstances, the firm can fix high price for its

product and can get super normal profit. This is possible only in short period. This is because in short-run no new firm can enter into market. In order to maximise its profit the firm will produce that level of output at which the MC= MR. This can be explained with the help of a diagram (Fig. 3.12).

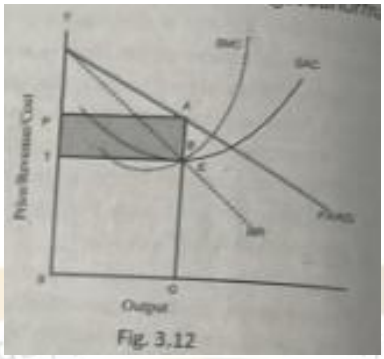


Fig. 3.12

In the diagram (Fig. 3.12) SMC is the short-run marginal cost curve and SAC is the short run average cost curve. AR and MR are the average revenue curve and marginal revenue curve respectively. E is the point of equilibrium of firm because at this point the MC = MR. At this point QA (OP) is the equilibrium price and OQ is the equilibrium output and sale. AB is the profit per unit. In this situation the firm is making abnormal profit equal to the area 'ABTP".

Possibility of normal profit or zero profit: When demand of the product is not very high, the firm gets only normal profit or zero profit. Firms get normal profit when AR is slightly more than AC. It gets zero profit when AR and AC are equal. These situations can be illustrated with the help of the following two diagrams:

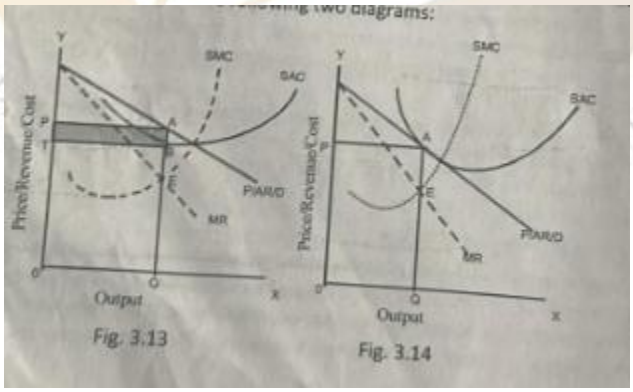


Fig. 3.13 Fig. 3.14

In fig 3.13 (given in the previous page), E is the point of equilibrium of the firm because at this point MC-MR. At this point OQ is the equilibrium output. QA (OP) is the price per unit. QB is the cost per unit. Hence BA is the profit per unit. Here All is slightly more than AC in this case, the firm is getting normal profit equal to the shaded area of 'ABTP´

In Fig. 3.14 (given in the previous page), E is the point of equilibrium of firm because at this point MC-MR. At this point OQ is the equilibrium output QA (OP) is the price unit. QA is also the cost per unit. Here AR and AC are equal. Therefore, the firm is not making any profit or loss. The firm is at break even.

Possibility of loss in the short run a firm may incur loss also, it happens when the demand is very low. Due to low demand, the firm has to sell at a price less than its cost. In this case All is less than AC. It can be illustrated with the help of the following diagram (Fig. 3.15): SAG A

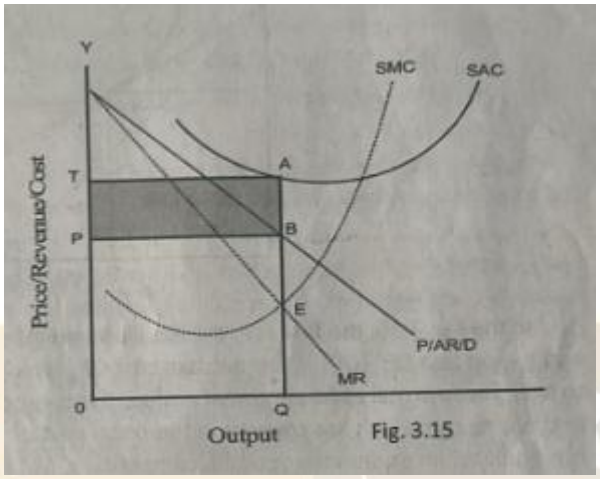


Fig. 3.15

In Fig. 3.15, AR of the firm is less than its AC. E is the equilibrium point. At this point 'OQ' is the equilibrium quantity. QB (OP) is the price per unit. QA is the cost per unit. Here cost per unit is higher than price per unit. Therefore, the loss per unit is BA(PT). The total loss is shown as the shaded area 'ABPT'.

Long run Equilibrium under Monopolistic Competition

Long term is the period in which a firm can adjust supply of its product according to its demand. In the long period all factors of production are variable. Therefore, the firm can change its size of plant to any extent. In the short period some firms under monopolistic competition may be making supernormal profits. Seeing this new firms may enter into the market in the long run. As a result of the entry of the new firms, the demand for products of the existing firms will come down slowly. Production and supply will increase. Consequently price will decrease. Therefore, in the long run the supernormal profit disappears. If a firm is suffering loss in the short period, some firms will leave the industry. As a result, the demand for products of the existing firm will increase. The production and supply will decrease. Consequently the price increases to the level of AC or slightly above the AC. Now the firm will get normal profit. Thus it is clear that in long run, all the firms get normal profit. The free entry and exit drive to normal profit or zero economic profit. The long run equilibrium of the firm under monopolistic competition will be at level where the MR = MC and under short run equilibrium MR = MC and AR may not be equal to AC). AR = AC

The long run equilibrium of price-output of the firm under monopolistic competition is explained with the help of the following diagram:

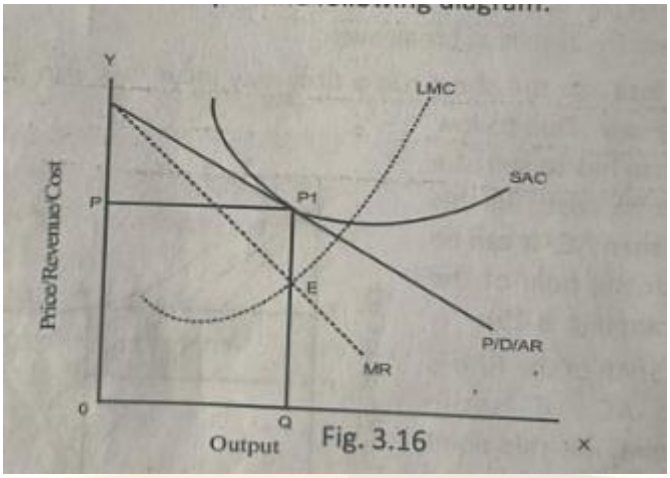


Fig. 3.16

In the Fig. 3.16, the firm is in the equilibrium in the long run when the output is OQ and the price is QP_1 (OP). Here average cost QP_1 which is equal to AR. MC is also equal to MR. The firm makes no abnormal profits. It incurs no loss. It makes only normal profit in the long run which are covered in the usual cost of production. In short, under long run equilibrium under monopolistic competition, MR = MC and AR = AC

Wastes of Monopolistic Competition (Evils)

The evils of monopolistic competition are called wastages of monopolistic competition. Some of the wastages are as follows:

1. Unused capacity: Under monopolistic competition a firm's equilibrium output is less than its optimum output. Thus there is unused capacity.

2. Waste of advertisement: Under monopolistic competition huge expenditure is incurred on advertisement to woo the consumers. It imposes burden on consumers. It only shifts the demand from one product to another.

3. Unemployment: Under monopolistic competition, the resources are not utilised up to the minimum point of long run average cost curve. This aggravates the problem of unemployment.

4. Inefficiency: Under monopolistic competition, there are large number of inefficient firms. These are not advantageously placed to produce more and reduce their price: They continue their business without leaving space for others.

5. Consumers are hypnotised: Product differentiation, like beauty, is in the eyes of the buyer. By way of different brand names, colour, package, beautiful displays etc. consumers are hypnotised to buy even inferior quality goods at higher prices

Difference between Monopoly and Monopolistic Competition

Monopolist competition differs from monopoly in the following ways:

1. Under monopoly there is only one producer or seller of particular commodity. But under monopolistic competition there are large number of sellers.

2. Under monopoly, the question of product differentiation does not arise. Under monopolistic competition, the producers make product differentiation.

3. Under monopoly, there is no competition, but under monopolistic competition, there is some degree of competition.

4. Under monopoly new firms cannot enter into market easily, while under monopolistic competition, new firms can enter into the market and existing firms can leave the market.

5. Under monopoly, the demand of the product is less elastic because there is no close substitute. Under monopolistic competition, demand of the product is elastic because there are some close substitutes.

6. Under monopoly, selling costs have no role to play. On the other hand, under monopolistic competition, selling costs have an important role.

Comparison between Perfect Competition and Monopolistic Competition

Similarities

Monopolistic competition resembles perfect competition in the following two ways:

1. In both markets each firm acts independently, without regard to the responses of its competitors.

2. In both market situations, free entry guarantees that firms earn normal profit in long run equilibrium

Differences

1. Under perfect competition products are identical. But under monopolistic competition product are differentiated.

2. Perfect competition is not a real concept. Monopolistic competition is a real concept.

3. Under perfect competition, there are large number of buyers and sellers. But under Monopolistic competition the number of buyers and sellers is not so large.

4. Under perfect competition, buyers and sellers have perfect knowledge of market conditions. But under Monopolistic competition the buyers and sellers do not have complete knowledge about the products.

5. Under perfect competition, selling costs do not play any role. Under Monopolistic competition, selling costs have an important role.

6. All perfectly competitive firms are price takers. But all firms under Monopolistic competition are price makers.

7. Under perfect competition demand curve is horizontal. But under Monopolistic competition the demand curve is a sloping down ward curve.

8. Under perfect competition, AR and MR are straight lines parallel to X axis. Price, demand, AR and MR all are same. Under Monopolistic competition Price, Demand, and AR are same. But MR is less than AR

Oligopoly

Oligopoly is an important form of imperfect competition. It is an umbrella term that describes market forms that fall between the extremes of monopoly and monopolist competition. The pricing problems of oligopoly have been analysed by Cournot and Edgeworth. Chamberlin, Paul M. Sweezy and Baumol are among the modern economists

who have developed theories of oligopoly. Meaning of Oligopoly eg. Smart Phone Industry.

The term 'Oligopoly' is derived from two Greek words, 'oligoi' which means 'a few' and 'pollein' which means to sell. Thus oligopoly is a market situation in which there are only few sellers producing homogeneous or differentiated products. It is a competition among the few because only a few big firms will be producing and competing in the market. Oligopoly arises due to the following reasons: (a) large capital requirements, (b) economies of scale, (c) aggressive entrepreneurs, (d) patent rights (e) mergers, (f)possession of some essential resources.

The automobile industry in India is oligopolistic in nature as only few firms produce and supply automobiles. Other examples are cement industry, steel industry etc.

Features of Oligopoly

Important characteristics of oligopoly are as follows:

1. Few Sellers: Under oligopoly, the number of sellers is very small. There are two or more but few sellers. They dominate the market for a product.

2. Homogeneous or differentiated product: Under oligopoly, firms produce either homogeneous products (like cement, steel, aluminium etc.) or differentiated products (cigarettes, automobiles etc.)

3. Interdependence of firms: Under oligopoly, all the sellers depend upon each other. Activities of one seller affect others also. A firm has to take into consideration the actions and reactions of other firms while determining its price and level of output. Like chess players, firms must observe and anticipate the moves and reactions of their rivals. So the firms are interdependent.

4. Price rigidity: Under oligopoly, activities of all firms are interdependent. Due to this reason, the firms do not like to change the price of their product frequently. The result is that the market price tends to be rigid or stable.

5. Element of monopoly: In oligopolistic market, there are only few firms. Hence there may be some monopoly, if there is product differentiation.

6. Excessive expenditure on advertisement: Each firm does not change its price. Hence, the only way to increase the sale is heavy advertisement and improvement in the design and quality of the product. Thus, advertisement plays an important role in a firm under oligopoly.

7. Uncertainty of demand curve: Under oligopoly a firm cannot forecast its demand or revenue curve. This is because it is very difficult to forecast whether competitors will change their policies or not. Due to these reasons, demand or revenue curve of an oligopoly firm is uncertain or indeterminate.

Classification of Oligopoly

Oligopoly can be classified on the following basis:

1. On the Basis of Product Differentiation

(a) Pure or perfect oligopoly: When all firms of an industry produce and sell identical or homogeneous product, it is called pure or perfect oligopoly.

(b) Differentiated or imperfect oligopoly: When all the firms of an industry produce and sell differentiated products or close substitutes for each other (but not perfect substitutes), it is called differentiated or imperfect oligopoly.

2. On the Basis of Entry of Firms

(a) Open oligopoly: In the case of open oligopoly, the firms are free to come into the market and go out of the market.

(b) Closed oligopoly: This is the market situation where new firms are not allowed to enter the industry.

3. On the Basis of Price leadership

(a) Partial oligopoly: Partial oligopoly refers to that market situation where the industry is dominated by one big firm (known as the leader) and the other firms (known as the followers) of the industry follow the price policy determined by leader.

(b) Full oligopoly: Full oligopoly refers to that market situation where there is no leader and no followers. Here price leadership is absent.

4. On the Basis of Agreement

(a) Collusive oligopoly: It is the market situation where the firms belonging to an industry follow a common policy of pricing. In other words, they combine together to avoid competition among themselves regarding the price and output of the industry by means of an agreement.

(b) Non-Collusive oligopoly: Under this market situation there is no among the firms regarding the price and output of the entire market.

Price Determination Under Oligopoly

The aim of firms under oligopoly is profit maximisation. In real life an oligopoly firm may face several difficulties in achieving this objective.

There is no one system of pricing under oligopoly. There are three different kinds or methods of pricing (or pricing models) under oligopoly. They are:

1. Independent pricing,

2. Pricing under price leadership, and

3. Pricing under collusion

Price - Output Determination Under Independent Pricing (Kinked Demand Model or Price Rigidity Model)

Under independent pricing, an oligopoly firm faces a kinked demand curve. The kinked demand curve model was first developed by Prof. Paul. M Sweezy in 1939 to explain price rigidity under oligopoly. An oligopolist does not know how his competitors will react. Hence he has to make guess. An oligopolist may assume that the price cut by him will be followed by a price cut by the rival firms, but the price rise by him will not be followed by a price rise by the rival firms. This hypothesis is the basis of 'kinked demand curve'. Thus the assumption behind the kinked demand curve is that each oligopolist will act and react in a way that keeps conditions tolerable for all members of the industry. Such a situation is most likely to occur when products are quite similar and therefore their prices also similar. If one firm cuts the price of its product, other firms in the industry are compelled to reduce their prices to match the firm's prices. On the other hand, if one firm increases the price, the competitors do not increase their prices. So in the first situation (price reduction) the firm does not gain while in the second situation (price rise) the firm loses its customer to its rivals and thus sales decline. So firms in oligopoly do not increase the prices due to the possibility of losing customers to rivals who do not raise their prices. Firms do not cut their prices because they fear a price war. So prices in oligopoly tend to be sticky or rigid. Firms usually do not change their price in response to small changes in costs.

In oligopoly under independent pricing, the demand curve will be kinked one. Kink means segmented. The demand curve will be segmented at the prevailing price level. The kinked demand curve has two segments - (i) the relatively elastic portion of the demand curve, and (ii) the relatively inelastic portion of the demand curve. This case is illustrated in fig 3.17

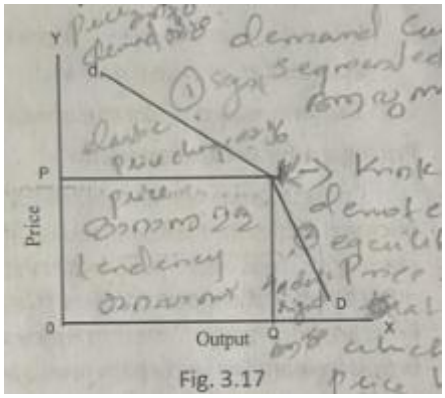


Fig. 3.17

A kinked demand curve dD with a kink at point K is shown in the Fig. 3.17. The prevailing price is OP (or QK) and the firm is producing and selling OQ output. Here dk is the relatively elastic segment of the demand curve and KD is the relatively inelastic segment of the demand curve. This difference in the elasticities is due to the particular competitive reaction pattern assumed by the kinky demand curve hypothesis.

The kink denotes the prevailing price level which the oligopolist will have a tendency to remain permanently. If he raises the price beyond OP the demand for product will come down. This happens because he loses his customers due to price rise and hence sales will decline. This is clear from the fact that dk portion of demand curve represents the relatively elastic nature of the demand curve. On the other hand, if he reduces the price from OP, the rivals will react immediately by reducing the price. The price cut does not lead to sufficient increase in demand. This is clear from the fact that the KD portion of the demand curve is relatively inelastic. So an oligopolistic firm will follow the prevailing price. He does not like to make any change in it. So each oligopolistic firm will have a kinky demand curve having two segments-the upper being relatively elastic and the lower segment being relatively inelastic.

Reasons for Price Rigidity

The oligopolist firm may not like to vary the price due to the following reasons:

1. The firm fears a price war.

2. Frequent changes in prices may irritate the consumers.

3. The firm may be satisfied with the present level of price, output and profit.

4 The present price may have been established after a prolonged period of price war or collusion,

5. Instead of cutting prices, firm with falling demand may intensify the sales promotion activities to increase demand.

6. The firm may not like the unnecessary inconvenience of new price lists. 1

Pricing under Price Leadership

Constant price war and instability will result in price leadership. Under price leadership, price will be determined by a leading firm (dominant firm) and the other firms will follow the same price. Thus under price leadership price is determined by leader firm (large firm) and all other firms of the industry follow this price. The leader firm is a price maker and the other firms are price-takers. The firm which acts as the leader firm is one which is either a low-cost firm, dominant firm or experienced and respected firm.

Types of Price Leadership

Price leadership may be of the following three types:

1. Dominant price leadership: Under this situation, there is one large firm with few small firms. Large firm is dominant. It may be producing a major share of the total output of the industry. It dominates the market. All firms follow the dominant firm and accept the price set by it and adjust output accordingly.

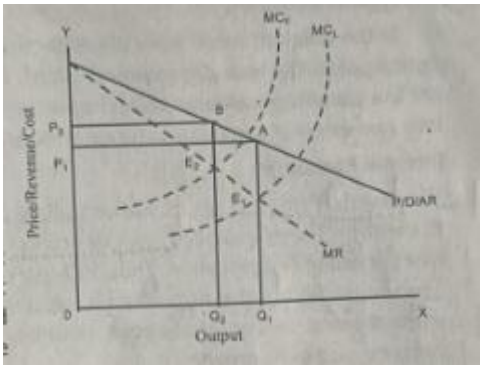
2. Barometric price leadership: Under this type of price leadership, an experienced and reputed firm (need not be the large) assumes the role of protecting the interest of all firms. It fixes the price of the product. This price is suitable for all the firms. Therefore, all the firms in the industry readily accept this price. Thus, one firm acts as a 'Barometer', reflecting the changing market conditions or costs of production that require a change in price.

3. Aggressive price leadership: Under this type of price leadership one dominating firm compels all other firms to follow its price policy. If any of the firms resists, it will be competed out of the market by the dominant firm

Price - Output Determination under Price Leadership

(a) Price Leadership by a Dominant Firm

Price-output determination is generally explained in terms of dominant price leadership. We assume that there are two firms - Land F. Cost of production of L is less than that of F. We also assume that both the firms are producing identical products. With these assumptions we can determine price and output under price leadership as follows:



In Fig. 3.18 (on the next page), MC_1 is the marginal cost curve of firm L. MC_F is the marginal cost curve of firm F. Marginal cost of the firm L is less than that of firm F. AR is the average revenue curve and MR is the marginal revenue curve. AR and MR curves for both the firms are identical because both the firms are producing identical products. In this case firm L will determine the price of its product at point E_1 where its MC = MR At this point its price will be QA (OP_1) and its output and sale will be α price of the firm L is less that of the firm F. The firm F has to compete with the low cost firm L (price leader) and it will be defeated in the price war if it fixes price at OP_2 which is higher than OP_1 price of the price leader. Hence firm F will be compelled to follow the price of leader firm L. It will charge the price OP_1 as set by firm L. It will also produce OQ_2 output which is the equilibrium output of the leader firm L. To conclude, OQ_1 price will prevail in the market and total output will be twice of OQ_1

(b) Price Leadership by Low Cost Firm

Sometimes a firm with low cost (barometric price leadership) acts as a price leader. It will fix the price and all other firms in the industry accept that price. This situation may be explained with the following graph (Fig. 3.19):

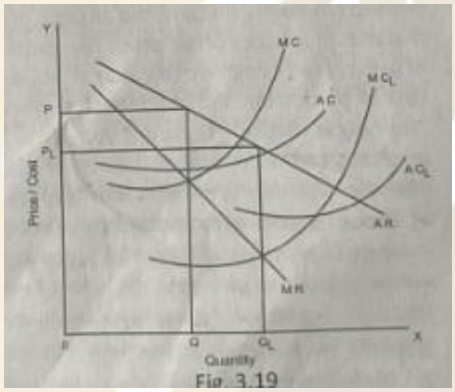


Fig. 3.19

Suppose all firms face identical revenue curves and different cost curves. Economies of scale may lead to low costs for a firm. AR and MR are identical revenue curves of all firms. AC_L and MC_L are the cost curves of the low cost firms costs are lower. The low cost firm sells OQ_1 quantity OP_1 price. Other firms sell OQ quantity at OP price. This price is higher. Hence the other firms would lose their customers to the low cost firm whose price is lower. Therefore, other firms accept price P_L set by the low cost firm (price leader) and recognize its leadership.

Economies of Scale

In the long run when scale of production is increased, firm gets economies of scale up to a point. The term "economies" simply refers to cost advantage. Economies of scale are the advantages of large scale production. Marshall has classified economies of scale into two-internal economies and external economies.

Internal Economies

When a firm expands its size or scale of production, certain cost advantages accrue to the firm. These are called internal economies. These are available to a particular firm when it expands production. Thus, internal economies are those economic advantages which arise within the firm when it expands its size or scale of production. In short, internal economies are those economies which are generated from within the firm as a consequence of its growth.

Internal economies arise when a firm reduces costs and increases production, Internal economies are also called 'real economies.

Types of Internal Economies

The following are the different types of internal economies:

1. Technical economies: As a firm expands its size, it can use better plants, machinery, equipments etc. It can use superior techniques. More specialised and automatic machines can be installed. Plant and machinery can be run at full capacity. Engineers go by what is called Two by Three rule, in which a 100% increase in volume requires only two-third material. It can also provide for research and development. A good example is Reddy's Labs. It spends heavily on research and development and brings out many innovative products. A large firm can avoid all kinds of wastage of material. It can make use of waste material to produce other goods (by-products). Further, a large firm has the advantage of using greater degree of division of labour and specialisation. This reduces the per unit cost of production and improves the efficiency of labour. Henry Ford once remarked, "Nothing is particularly hard if you divide it into small jobs". Adam Smith laid a great emphasis on the concept of division of labour. He stated that division of labour plays a vital role in increasing the productivity of labour. For explaining the importance of division of labour, he cited an example of pin making in an organisation. The pin making function involves 18 processes. If these 18 processes are performed by a single worker, it would not be possible to complete the whole function or it may take much time to produce a single pin. Therefore, if these tasks are divided among a number of workers, then it would be easier to produce large number of pins in a day.

2. Managerial economies: When a firm expands its business, it can employ highly skilled managerial experts to look after production, sales, accounts etc. With the further growth, is not necessary to increase the staff proportionately. To manage additional volume of output produced and marketed, an additional manager is not required. Thus managerial cost is reduced when the scale of production increases. In addition to these, computer network, telex machines, fax machines, electronic mail services etc. can be used to save time, money and effort.

3. Commercial economies: Large firms require raw materials of bulk quantity. The firm gets discounts on account of bulk purchase. Further, the transportation cost will be minimum. Since the firm keeps large quantities of stocks, storage cost is reduced. Some large firms have their own railway tracks from the nearest railway point to the factory. They can reduce the cost of transporting goods in and out

4. Marketing economies: Large firms sell in large quantity. Hence selling expenses per unit falls. They can spend large amounts for advertising. Advertising brings more sales. Advertising and packaging cost per unit will be very much lower for a large firm. Large firms enjoy reputation in the market. They can employ marketing experts and selling agents. Large firms are able to undertake market research to identify needs and changing preference of consumers. Accordingly, necessary changes can be made in the existing products or new products can be developed. All these will increase the reputation of the firm. Such opportunities are not available to small firms.

5. Financial economies: Large firm enjoys reputation in the capital market. Hence it can borrow money very easily on favourable terms. It gets loans at lower rates of interest from banks and financial institution due to its larger assets and greater selling potential. It can build huge reserves. During emergencies, it can make use of these reserves.

6. Risk and survival economies: Bigger firms are in a better position to spread the risk. This is possible through diversification. Large firms produce a variety of products. A fall in demand for any one product does not make much trouble because it may be offset by a rise in demand for other products. Further, large firms will be able to survive in times of depression by making use of its reserves. They can meet competition as well.

7. Welfare economies: A large firm can provide welfare facilities to its employees such as subsidised housing, subsidised canteens, creches for the babies of women workers, recreational facilities etc. All these will raise the efficiency of human capital. This increases production and reduces costs

External Economies

When many firms expand in a particular area, each firm gets a number of advantages. These are known as external economies. These are enjoyed by all firms in common due to the expansion of the industry. Thus external economies are those economies which are available to all firms in the industry when the industry expands. In short, external economies are those economies which arise as a consequence of concentration and growth of an industry within an area. External economies are also called 'pecuniary economies.

Types of External Economies

The external economies are of the following three types:

1. Economies of concentration: When a large number of firms concentrate in an area (industry grows or expands) then all these firms get some common benefits. These include improved transport system, growth of banking services, marketing services, better means of communication, easy supply of raw materials, availability of training facilities etc. These arise due to localisation of firms. Prof. S.E. Thomas says, "External economies are those which arise from the localization of industries, and are at the disposal of all firms in the same industry".

2. Economies of information: When the number of firms in an industry increases, it becomes possible for them to undertake some activities collectively. They may undertake research, experiments etc. Information regarding such studies are published in journals and bulletins for the benefit of all firms in the industry. These journals and bulletins provide information about modern technology, inventions, market conditions, new products developed in abroad, etc. A big industry may establish a research centre, common information centre etc. for supplying information to all firms.

3. Economies of disintegration: When an industry expands, the firms may mutually agree to divide the production process among themselves. Every firm specialises in the production of a particular item concerning that industry. For example, in case of cycle industry concentrated at a particular place, some firms specialise in the chains, some others in pedals, rims, hubs etc. This is called disintegration. This helps to reduce duplication of work. It also helps to save time and materials. Thus disintegration reduces costs for the member firms in an industry. It will also be advantageous to the industry as a whole

4. Economies of social development: Society is also benefited through the expansion of industry. The employment opportunities increase. People get more income. In short, the standard of living of the people in the industrially localized area will rise.

Diseconomies of Scale

When Mahatma Gandhi was assassinated in 1948, Bernard Shaw's response was "to be too good is dangerous". Similarly, too much beauty got Sita kidnapped (in Ramayana), too much ego got Ravana killed (in Ramayana) and too much charity got Mahabali in deep trouble. Thus, too much of anything is bad.

When a firm continues to expand beyond a certain limit (optimum level) economies of scale disappear and diseconomies of scale will begin to arise. Diseconomies are the disadvantages which a firm faces when the scale of production is expanded beyond a certain level. Diseconomies of scale may be of two types- internal diseconomies and external diseconomies.

Internal Diseconomies

Internal diseconomies are peculiar to a firm. These fall within a firm. Hence these will affect only a particular firm.

Types of Internal Diseconomies

The following are the different types of internal diseconomies:

1. Managerial Diseconomies: When a firm is expanded too much, managerial problems increase and managerial efficiency declines. Management may be overloaded with decisions. Hence there may be delay in decision making. Another problem is red tapism. When a firm grows too much, co-ordination, supervision and control become difficult. There is no personal contact between management and workers. This results in labour troubles.

2. Technical diseconomies: Existing machineries and equipments are overstrained due to continuous production on large scale. There are more chances of accidents and breakdown of machinery. Hence cost of maintenance will be high. All these will increase cost of production. Another problem is non-availability of technical experts to handle the sophisticated machines. If production is increased too much, there may arise problem in division of labour.

3. Financial diseconomies: For expansion, large amount of funds are required. When a firm borrows too much, it has to pay heavy interest. Further, a number of curbs are being imposed on large borrowers. These cause trouble in the proper functioning of the firm. Again, there are more chances of mismanagement of funds.

4. Risk and survival diseconomies: As the capital investment increases, risk also increases. Risks like strike, lock out, lay off etc. are more in case of large establishments. An error in decision-making by top management may adversely affect the performance of the firm. This results in loss. Thus large scale businesses are more risky than small scale businesses

External Diseconomies

Over expansion of an industry in a particular area brings certain external diseconomies. These diseconomies are suffered by all the firms in an industry. Thus external diseconomies are those disadvantages which are suffered by all the firms in an industry when the industry expands in a particular area. In other words, external diseconomies are the evils on the industry as a whole and also on environment as a result of expansion or concentration of industry in a particular area.

Types of External Diseconomies

External diseconomies are of the following types:

1. Transportation diseconomies: Concentration of many firms in an area puts heavy pressure on the traffic system. This causes frequent traffic jams (congestion) and severe bottlenecks. As a result, it becomes difficult to get raw materials in time and to send finished goods in the most appropriate time. Thus cost of transportation increases.

2. Commercial diseconomies: When firms expand their sizes, naturally the prices of land, raw material, labour etc. will increase due to increase in demand for these factors. Rent of building will also increase. There may be scarcity of fuel, electricity, water, power, finance etc. These cause increase in cost of production.

3. Financial diseconomies: When the industry expands, there may be pressure on banks and financial institutions. This causes financial problems for the firms. Further, large expenditure will have to be incurred on pollution control devices.

4. Marketing Diseconomies: As the industry expands, competition increases among the firms. Gradually, the firms will fall in unhealthy competition. Consequently, firms resort to unfair trade practices. They are forced to spend heavy amounts on advertisements, sales promotion etc.

5. Social Diseconomies: The concentration or expansion of an industry in a particular area will affect not only the firms but also the public at large. The most serious diseconomy is environmental pollution (water, air etc). The traffic congestion creates problems to people. The cost of living increases. Prices of land, building etc. are high. The society has to suffer on account of scarcity of electricity, water etc. Prices of products increase due to heavy advertisement, sales promotion etc.

Game Theory

Imagine a game where every player's decision affects not just their own result, but also the outcomes of others. The key idea is to predict what each player will do, based on the assumption that everyone is trying to make the best choice for themselves. This is what game theory helps us understand - how people make choices in situations where their success depends on the choices of others.

Game theory was developed by mathematician John Von Neumann and economist Oskar Morgenstern in the 1940s. In 1951, mathematician John Nash provided the first significant extension of the game theory developed by Neumann and Morgenstern. This is known as 'Nash Equilibrium'.

What is Game Theory?

Game theory is a branch of mathematics. It studies strategic interactions where the outcome for each participant depends on the actions of all involved. It is a powerful tool for understanding and predicting how people make decisions in situations where their outcomes depend on the choices of others.

Thus, game theory is the study of how and why individuals and entities (called players) make decisions about their situations.

Useful Terms in Game Theory

Here are a few terms commonly used in the study of game theory:

1. Game: A game is any set of circumstances that has a result dependent on the actions of two or more decision-makers (players).

2. Players: Players are strategic decision-makers within the context of the game.

3. Strategy: A strategy is a complete plan of action a player will take given the set of circumstances that might arise within the game.

4. Payoff: The payout is what a player receives from arriving at a particular outcome. The payout can be in any quantifiable form, from money to utility.

5. Information set: This is the information available at a given point in the game. The term "information set" is most usually applied when the game has a sequential component.

6. Equilibrium: This is the point in a game where both players have made their decisions and an outcome is reached

Single-Move Games

In game theory, a single-move game refers to situations where players make their decisions all at once, without any further rounds or opportunities to adjust their choices. In these games, everyone makes their decision simultaneously, and the outcome is based on what each player chooses.

Example of a Single-Move Game: The Prisoner's Dilemma

One of the most famous examples of game theory is the Prisoner's Dilemma. Let's explain this:

1. Two people are arrested for a crime.

2. They are held in separate rooms and cannot communicate with each other.

3. The police offer four deals:

a) If both confess, they will each receive a three-year prison sentence.

(b) if Prisoner 1 confesses, but Prisoner 2 does not, Prisoner 1 will get one year and Prisoner 2 will get five years.

(c) If Prisoner 2 confesses, but Prisoner 1 does not, Prisoner 1 will get five years, and Prisoner 2 will get one year.

(d) If neither confesses, each will serve two years in prison.

The most favourable strategy is to not confess. But they don't know what the other will do. The dilemma arises because both prisoners might think that betraying the other is their best option to avoid a harsh sentence. The Nash equilibrium suggests that in a prisoner's dilemma, both players will make the move that is best for them individually but worse for them collectively.

Nash Equilibrium

Nash equilibrium is an outcome reached. Once achieved the outcome, no player can increase payoff by changing decisions unilaterally. The Nash equilibrium is reached over time, normally. However, once the Nash equilibrium is reached, it will not be deviated from. In such a case, consider how a unilateral move would affect the situation. Does it make any sense? It shouldn't, and that's why the Nash equilibrium outcome is described as "no regrets."

Thus, this is a situation where no player can improve their outcome by changing their decision, assuming others' decisions remain the same.

Multiple-Move Games

Unlike single-move games, multiple-move games involve a series of decisions over time. Players take turns or have the opportunity to adjust their strategies based on what happens in each round. These games are more complex because players can react to each other's previous moves, making the strategies more dynamic,

Example of a Multiple-Move Game: Chess

Chess is a classic example of a multiple-move game. In chess, players take turns making moves, and each move depends on the previous one. At each step, players must think about how their opponent will respond, and they can adjust their strategy as the game progresses.

For example, in the early stages of the game, players might focus on controlling the center of the board and developing their pieces. As the game advances, the strategy shifts toward attacking the opponent's king or defending one's own. Each player's choices are influenced by the past moves and the anticipated future moves of the opponent

Key Concepts in Multiple-Move Games

1. Strategies: In multiple-move games, a strategy is a plan of action that a player will follow through all the moves, depending on how the game unfolds. For instance, in chess, a strategy could be to focus on defense in the early stages and offense in the later stages.

2. Backward induction: This is a method used to find the optimal strategy in a game where players make multiple moves. It involves looking ahead to the end of the game and working backwards to determine the best strategy. This is common in decision-making situations like negotiations or pricing strategies.

3. Repeated games: Some multiple-move games involve the same players interacting over and over again. For example, two companies might compete in the market for years. The players have the chance to build reputations, and their strategies might change based on past interactions. In these games, co-operation or competition can emerge based on the history of the relationship.

Differences Between Single-Move and Multiple-Move Games

Following are the differences between single-move games and multiple-move games:

1. Time element: In single-move games, everything happens in one go, while in multiple-move games, players take turns or make decisions over time.

2. Strategy complexity: Single-move games are often simpler because players only need to consider one choice, but multiple-move games require ongoing planning and adjustments based on what has happened so far.

3. Outcome dependence: In multiple-move games, the outcome often depends not only on the current move but also on the whole history of the game and future expectations. In single-move games, the outcome depends only on the current move.

CHAPTER – 4

BUSINESS IN THE FACTOR MARKET

Land, labour, capital and organisation are the major factors of production. Production is the result of the combination of these factors. Hence the produced commodity should be distributed among these factors. For this, it is necessary to price the services of these factors of production (and not to price the factors of production). This is called factor price. In economics, it is called theory of distribution. Accordingly, rent is the price of the service of land; wage is price of the service of labour, interest is the price of the service of capital; and profit is the reward of entrepreneur's service.

It should be noted that a factor of production is not priced in the same way as a commodity is priced. However, the factor pricing and product pricing is similar to certain extent. The price of any factor like the price of any commodity is determined by the forces of demand and supply. On the demand side, the marginal utility or the marginal productivity influences the price of the factor as well as the price of any product. Here ends the similarity between factor pricing and product pricing. But on the supply side, the factor pricing and product pricing are not the same. Under product pricing supply of the product is influenced by the marginal cost of production. But in factor pricing, on the supply side, there are no marginal costs of production of land or labour etc. Supply of land or labour will not change according to the changes in their prices.

In this chapter we study pricing of labour and capital

Labour

Labour is the most important factor of production. This is because without labour, it is impossible to produce any product or service. Further, labour has a human element in it (i.e., it is a living factor). In economics, labour means mental or physical work done by a person with a view to earn an income.

Labour Market

Just as a product or service has a market, labour too has a market. It is in this market, the services of labour are bought and sold.

Meaning of Labour Market

Labour market simply means the market where the services of labour are bought and sold. It is the place where employers (companies, businesses, organizations) look for people to work for them, and people (workers or job seekers) look for jobs. In the labour market. employers offer jobs, and workers offer their skills, time, and effort. In short, labour markets the place where people find work and businesses find the help they need

Wages

Labourers supply labour (services) in the production process. In exchange of that service, they get wages. Thus, wage is the reward (price) paid to labour.

According to J.R. Turner," A wage is a price, it is the price paid by the employer to the worker on account of labour performed."

In short, wage is the price paid by an entrepreneur to the workers employed in production.

Difference between Wages and Salaries

In economics, wage means price of labour and salary is the price of organisation. In accounting wage is the direct expense, while salary is the indirect expense. In ordinary language, wage is the payment to unskilled labour, but salary is the payment to skilled labour.

Nominal Wages and Real Wages

Wages can be expressed in two forms, namely, nominal wages and real wages. Nominal wages are the wages paid in money. They are the money wages. Money wages represent the money income of the labourer. When wages are paid in money they are immediately converted into commodities and services. Suppose a carpenter is paid 1,000 for the work he has done. He does not keep the money with him, but purchases commodities and services with these 1,000. Suppose with 1,000, he is able to purchase rice, wheat, sugar, fish, vegetables etc. The amount of commodities and services which can be purchased by a labourer for the money wages received by him is called real wage. In other words, real wages are actual amount of commodities and services which can be purchased for a given money wage. In short, it is the purchasing power of money wage. Real wages are the wages in terms of necessaries, comforts and luxuries that a worker will buy with his money wages/

Industrial Relations

Employers (business organisations) hire workers for producing goods. They create jobs. They pay wages and provide working conditions. Workers engage in the production process. They contribute their skills and labour to the employers (organisation) in exchange for wages. Thus, there is a direct contact or relation between workers and employers.

In industry workers play an important role in producing the goods. Usually the workers demand a fair share in the goods produced. The management or the employer may not accept their demand. This may lead to strike on the part of workers. Thus, there will be

dispute and unrest in the industry. That is, the relation between workers and employers in the industry is not so good. In short, the industrial relation is not healthy or conducive In order to keep the wheels of industry moving, a good or healthy relation must exist in the industry.

Meaning of Industrial Relation

Industrial relation simply refers to the relations between the parties concerned with Industry (Le., workers and industrial management).

According to Dale Yoder, "Industrial relation is the relationships between managements and employees, or among employees and their organisations, that characteristise or grow out of employment."

Thus, industrial relation deals with how workers and employers interact, how they resolve disputes, and how they work together to ensure a fair and productive working environment. In short, industrial relation is the relations between employers and employees in the industry.

Problems or issues of Industrial Relation

A good industrial relation creates a healthy and productive work environment. But the industrial relation need not always be healthy. Several problems may arise. These problems make the relationship difficult to manage. These problems affect both workers and employers. These lead to tension and conflicts. The main issues or problems in industrial relation are industrial discipline, industrial unrest, trade unionism, industrial democracy and some others. Let us examine these problems separately.

Industrial Discipline: Discipline is essential for smooth running and conduct of any activity. In industry, it is more essential. Industrial discipline refers to the rules and regulations that workers must follow in the workplace. It includes expectations about punctuality, behaviour, safety standards, and work performance. When industrial discipline is not maintained, several issues may arise. Some of them are:

a) Lack of productivity: If workers do not follow the rules, quality and productivity of work shall decrease.

b) Employee misconduct: Violations of workplace rules, such as absenteeism, fighting, or disrespecting authority, may lead to conflicts.

c) Poor work culture: It creates a negative environment in the workplace. This can lead to low morale and high turnover rates.

Industrial Unrest: Industrial unrest refers to situations where employees are unhappy or dissatisfied with their working conditions. This can lead to protests, strikes, or even violent behaviour. The causes of industrial unrest include the following:

a) Poor working conditions: Employees may protest if they feel their work environment is unsafe or uncomfortable.

b) Low wages: When workers feel that they are not being paid enough for the work they do, they may strike or protest.

c) Lack of job security: If employees feel their jobs are at risk, especially due to layoffs or automation, they may become anxious and they protest.

d) Unfair treatment: Workers may feel discriminated against or treated unfairly, such as unequal pay for the same work. Then they may raise their concerns through industrial unrest.

e) Unresolved grievances: When workers' complaints are ignored or not addressed by management, it can lead to frustration and unrest.

Trade Unionism: Trade unions are associations or organisations that represent workers. These are formed for protecting the rights of workers. The objects of trade unions are: (a) to secure better wages for workers, (b) to secure more bonus for workers, (c) to secure better working conditions, (d to ensure job security, (e) to provide self confidence to workers (f) to maintain industrial peace and harmony, etc.

Some problems may arise due to trade unionism important problems are: Conflict with employers, (b) over-unionisation, (c) lack of co-operation, (d) Strikes and protests, etc Industrial Democracy: Industrial democracy refers to the idea that workers should have a say in the decisions that affect their jobs and working conditions. This can include things like voting on company policies or being involved in decision-making processes. This seems to be like a good idea. However, there are problems that can arise with industrial democracy. Some of them are:

a) Decision-making challenges: In a company with many workers, involving everyone in decision-making may be difficult.

b) Conflict over decisions: Workers may disagree with management on key decisions. such as budget cuts, layoffs, or changes in work processes.

c) Lack of experience: Workers may not always have the experience or knowledge needed to make complex business decisions.

d) Unrealistic expectations: Some workers may think that industrial democracy means they should have control over every decision in the company.

Other Problems in Industrial Relations

In addition to the above issues, there are other common problems that can affect industrial relations. They are:

a) Job Insecurity: In today's world, many workers face the fear of losing their jobs due to automation, outsourcing, or economic downturns. This insecurity can lead to stress, poor morale, and a lack of loyalty to the company.

b) Workplace inequality: Sometimes, there is unfair treatment in the workplace based on gender, race, or age. Workers who face discrimination may feel undervalued and may demand changes. This can lead to conflicts and even legal action.

c) Management-employee communication: Poor communication between management and employees is another major problem in industrial relations.

d) Globalization: As companies become global, they often outsource jobs to other countries where labour is cheaper. This can cause job losses for workers in higher-wage countries. This leads to resentment and conflict between workers and employers

Methods to Prevent and Settle Industrial Disputes

There are several methods used to settle industrial disputes. The important methods are:

1. Negotiation: This is when workers and employers sit down and discuss their issues to reach an agreement. Both sides try to find a solution through direct conversation without third-party involvement.

2. Mediation: If negotiation fails, a neutral third party (a mediator) helps both sides communicate and work towards a fair solution. The mediator doesn't make decisions but helps guide the discussion.

3. Arbitration: In arbitration, a neutral third party (an arbitrator) listens to both sides and then makes a binding decision that both the employer and employees must follow.

4. Conciliation: Similar to mediation, conciliation involves a neutral third party who tries to bring both sides together and find a compromise. The conciliator helps both sides understand each other's position but does not make a final decision.

5. Workplace committee: This method involves creating a committee of both workers and employers to discuss and resolve ongoing disputes. This encourages co-operation and prevents conflicts from aggravating.

Collective Bargaining

An industrial worker is economically weak. Therefore, he or she has very little bargaining power. When workers form a group or union, their strength will increase. They can now bargain with the employer to raise and meet their work-related demands. Such bargaining of trade union is known as collective bargaining. Thus, collective bargaining means workers forming trade unions or associations to bargain collectively with the employer to achieve higher wages, secure non-wage benefits, get improved working conditions, etc

Determination of Wage Rate

There is demand for labour and supply of labour. Wage is determined by the demand and supply forces. It is determined at the point where the demand and supply curves intersect each other.

Determination of Wage under Perfectly Competitive Labour Market

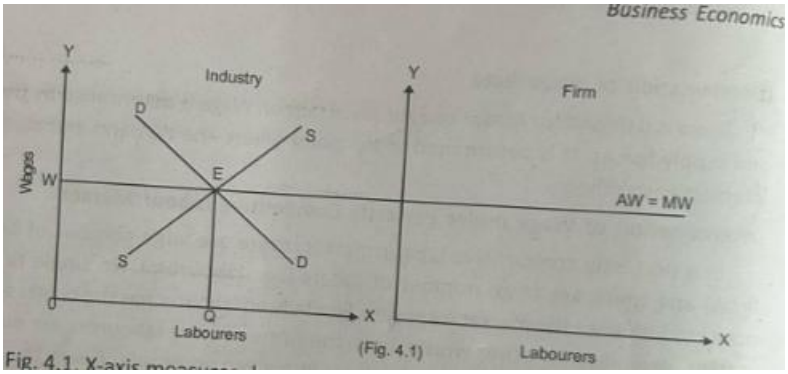
In a perfectly competitive labour market, there are large number of buyers (Le firms) and there are large number of sellers (le., labourers). No single firm has the power to influence the market wage rate. Similarly no labourer has the power to influence market wage rate. In other words, both the firms and the labourers are wage takers.

The firm can engage a number of workers at a given wage rate. Given the wage rate, the firm tries to maximise its profit. From this profit maximisation process, we get the demand curve of labour. The demand curve for labour will be downward sloping By adding the demand curves of different firms we get the market demand curve. The demand curve for labour in the labour market is downward sloping because of the law of diminishing returns. This means that as more workers are hired, the additional output (or benefit) produced by each extra worker becomes smaller. As a result, companies are willing to pay less for additional workers. If wages are high, businesses will not hire as many workers because the cost is too high for the value they get in return. But if wages are lower, companies are willing to hire more workers since the cost is more reasonable compared to the benefits they get from the extra labour. So, the lower the wage, the higher the demand for labour and vice versa. This is the reason behind the downward sloping demand curve for labour.

At any given wage rate, the labourers try to maximise utility. From this process of maximisation of utility, we get the supply curve of labour. The supply curve of labour is upward rising. By adding the supply curves of different individuals, we get the market supply curve of labour. Supply of labour depends upon the wage rate. When the wage rate is more than the subsistence level, there shall be a continuous flow of labour. When the wage rate is less than the subsistence level, the supply of labour will be less. This means that the greater the wage rate, the more shall be the supply of labour. Hence, the supply curve will be upward rising.

An increase in demand for labour, with the given supply will cause the wage rate to rise. Similarly, an increase in supply of labour, with a given demand, will cause the wage to fall.

As stated earlier, the market wage rate is determined by the forces of demand and supply. What will be the market wage rate and how much labour a firm will employ shall be discussed with the help of the following diagram:



(Fig. 4.1)

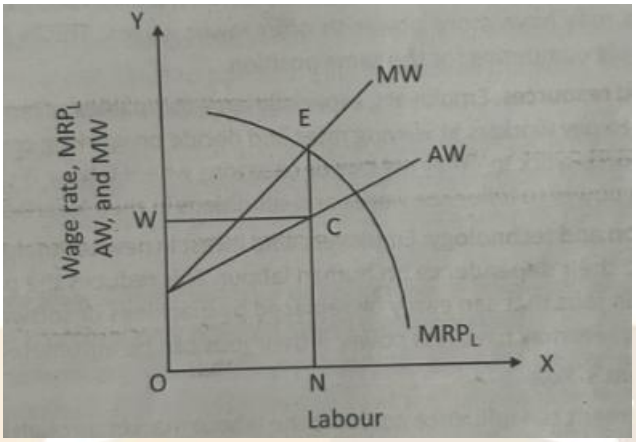
In the Fig. 4.1, X-axis measures demand and supply of labour. Y-aixs measures wage rate. DD is the demand curve of the labour. SS is the supply curve of the labour. Both the curves intersect at point E. This is the equilibrium point. At point E, the equilibrium wage rate is OW. Equilibrium demand for labour and equilibrium supply of labour are OM. Both are equal at this wage rate. If wage rate is greater than OW, the supply of labour is more than demand. In this situation, there is competition among the labourers to get work. As a result, the wage rate falls. It continues to fall until the wage rate OW is reached. Again, if the wage rate is less than OW, the demand for labour is greater than the supply of labour. Higher demand for labour raises the wager rate up to OW. In this way, equilibrium wage rate remains at OW

Determination of Wage under Imperfectly Competitive Labour Market

In a perfectly competitive labour market, all the workers are willing to work at the fixed wage rate. That is why average wage (AW) is equal to the marginal wage (MW). In case of imperfectly competitive labour market also, the labour supply curve is upward rising. As a result, MW increases but we have MW > AW. It implies that MW curve lies above the AW curve. The motive of the employer is always to maximise his profit and he employs labour upto the point where MW - MRP (MRP = marginal revenue productivity of labour). MW <MRP, implies that to employ additional labour is profitable and MW > MRP, implies that to employ additional labour is unprofitable. The MRP is the additional revenue obtained by employing an extra unit of labour and MW is the additional wage paid by the employer for employing an extra unit of labour. This is shown in the Fig. 11.5. In this figure X-axis measures the quantity of labour and Y-axis measures wage rate, MRP, MW and AW. Here, MW and AW both are upward rising. It shows that higher wage rate is paid to employ more labour. When AW increases, MW increases more than AW. MRP, curve is downward sloping and concave to the origin.

The MW curve intersects the MRP, at point E where the MRP, equals to the MW at ON units of labour employed and total profit is maximum. Here average wage is NC (OW) at ON units of labour employed. 50, the equilibrium wage rate in the labour market is OW and the equilibrium amount of labour employed is ON. But the equilibrium wage rate is not determined at point E where EN is the marginal wage and CN is the average wage. The employer will give only average wage. So, the average wage CN is the equilibrium wage. CN is less than the MRP, by EC which is difference between the MRP, and the average wage. This

difference is called exploitation of labour. This is because their wage rate is less than their MRP,. That is why, in an imperfectly competitive labour market, the wage rate is lower than in the perfectly competitive labour market.



Power in the Labour Market

Power in the labour market refers to the ability of either workers or employers to influence the terms and conditions of employment, such as wages, working hours, and job security. The balance of power between workers and employers plays a crucial role in determining how the labour market functions. The different sources of power in the labor market may be explained as below:

1. Workers' Power

Workers can gain power in the labour market in the following ways:

a) Skills and expertise: Workers with specialized skills or knowledge that are hard to replace often have more power. For example, a skilled doctor, engineer, or programmer can demand higher wages because their expertise is in high demand and not easily substituted.

b) Union strength: When workers are part of a strong trade union, they can collectively negotiate for better wages, benefits, and working conditions. Unions help workers organize and have a bigger impact than individual workers alone. If a large group of workers decides to strike or protest, it can pressure employers to meet their demands.

c) Scarcity of labour: If there is a shortage of workers for a certain job or industry, workers gain more power because employers have to offer better pay or working conditions to attract and retain employees

2. Employers' Power

Employers also hold power in the labour market in the following circumstances:

a) Control over jobs: Employers have the authority to hire, fire, and set the terms of employment. They can offer jobs to workers. This gives employers significant control over the labour market. If there is a surplus of workers for a certain type of job, employers may have more power to offer lower wages. This is because there are many people competing for the same position.

b) Capital and resources: Employers, especially large companies, often have the financial resources to pay workers at varying rates and decide on working conditions. They can also outsource work to other regions or countries where labour is cheaper. This gives employers power to influence wages and conditions in their local labour market.

c) Automation and technology: Employers who invest in new technology or automation can reduce their dependence on human labour. This reduces the power of workers, especially in jobs that can easily be replaced by machines or software. For instance, factory workers may have less power if their jobs can be automated by robots.

3. Government's Role

The government can influence power in the labour market through laws and policies:

a) Labour laws: Governments create laws to protect workers' rights, such as setting minimum wages, ensuring safe working conditions, and preventing discrimination. These laws can shift the balance of power in favour of workers.

b) Regulating employment practices: Governments can regulate things like working hours, overtime, and workplace safety. This helps ensure workers are not exploited. For example, in countries with strict labour laws, employers may have less power to demand long working hours without fair compensation.

4. External Factors

Various external factors may also affect power in the labour market:

a) Economic conditions: During periods of high economic growth and low unemployment, workers tend to have more power because employers compete to hire skilled workers. The employers often offer better pay and benefits. On the other hand, during economic downturns, when there are many people looking for jobs, employers hold more power.

b) Globalization: With globalization, companies can move production to other countries where labour is cheaper. This reduces the power of workers in higher-wage countries because they are competing with workers worldwide.

Low Pay and Discrimination in the Labour Market

In the labour market, low pay and discrimination are two important issues that affect workers' opportunities and their overall well being these two issues may be explained separately

1. Low Pay

Low pay refers to wages that are considered too low to meet the bare needs of workers, such as food, shelter and health care. Workers who are paid low wages often struggle to maintain their lives. There are several reasons why low pay happens

a) Unskilled or low-skill jobs: jobs that require little training or education, like cleaning or basic manual labour tend to pay less. This is because the work is easier to find and often doesn't require specialized skills

b) Supply and demand: When there are many workers available for a job, employers pay less because there is less competition (among the employers) for the position This can happen in industries where there is an oversupply of workers, such as in retail or agriculture.

c) Minimum wage laws: Some countries or regions set a minimum wage. This is the lowest amount employers are legally allowed to pay workers

d) Part-time or temporary work: Many workers in low paid jobs are part time of temporary employees. This means they don't get the full benefits or higher pay that permanent employees may receive.

2. Discrimination in the Labour Market

Discrimination in the labour market occurs when workers are treated unfairly based on characteristics such as their gender, race, age, disability, or ethnicity, rather than their abilities or qualifications. Discrimination can happen at any stage of employment, from hiring to promotion. Some common forms of discrimination are

a) Gender discrimination: Women may be paid less than men for doing the same work, In some industries, women are often given lower paying roles or are overlooked for promotions despite having the same qualifications.

b) Racial and ethnic discrimination: People from certain racial or ethnic backgrounds may face unfair treatment in hiring, training, or promotion opportunities. They might be passed over for jobs or given lower wages than workers of other backgrounds, even if they have the same skills.

c) Age discrimination: Older workers might face difficulty in getting hired or promoted Employers may favour younger workers, believing they are more adaptable or cost effective. This can result in fewer opportunities and lower wages for older employees

d) Disability discrimination: Workers with disabilities may face barriers in finding a job, or they may receive lower pay and fewer opportunities for advancement, even they are capable of doing the job.

The Impact of Low Pay and Discrimination

Both low pay and discrimination can have serious consequences for workers. These may be briefly explained as below:

a) Poverty and financial strain: Low pay can trap workers in poverty, especially if they have families to support. It can limit their access to health care, education, and housing

b) Limited career growth: Discrimination can prevent workers from advancing in their careers. This leads to fewer opportunities for promotions, and professional development.

c) Low morale and job satisfaction: When workers feel they are being paid unfairly or treated differently because of their gender, race, or age, they may feel demotivated and dissatisfied with their work. This may hurt their productivity and well-being

d) Economic inequality: When large groups of workers are paid poorly or discriminated against, it leads to greater economic inequality in society

Investment and Employment of Capital

Once a business makes an investment, it uses the capital (the machines, buildings, etc.) to produce goods or services. This is called the employment of capital. The more capital a company employs, the more it can produce and the more it can sell.

Pricing of Capital Services

In the economy, businesses need capital to produce goods and services. Capital refers to the money or resources used in production, like machinery, buildings, tools, or technology. The services of capital refer to the use of these resources in production. For example, when a company uses machines to make products, the machine provides a "service" of capital to the business. Let us examine how the demand for and supply of capital services work and how this affects capital pricing.

1. Demand for Services of Capital

The demand for services of capital refers to how much capital businesses need to produce goods or services. In simple terms, it is how much machinery, equipment, or technology companies want to use to produce things. The demand for capital originates from investment decisions of the business.

2. Supply of Services of Capital

The supply of services of capital refers to the availability of capital resources that businesses can use. This includes things like machines, factories, land, and financial capital (money for investment). The supply of capital services depends on how much capital is available for businesses to rent, lease, or purchase in other words, the supply of capital results from

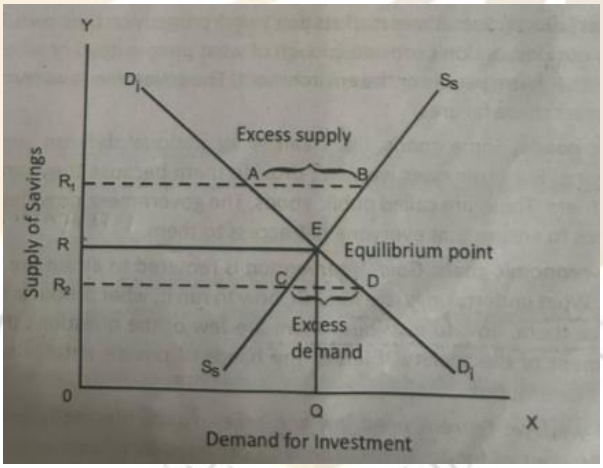
savings of the people. Thus, savings and investment are the two factors which determine the price of capital (ie., interest).

3. Determination of Price of Capital Services

The price of capital services is determined by the interaction between the demand and supply of capital. If businesses want more capital than is available, the price for using capital increases. For example, if many companies want to buy the same machinery or borrow money to invest, the cost of borrowing money (interest rate) goes up, or the price of machinery increases. This is because the supply is limited, and businesses are competing to access it.

If there is a lot of available capital and businesses don't need much of it, the price of capital decreases. For example, if interest rates are low and banks are offering cheap loans, businesses can borrow money at a lower cost. Similarly, if there's a surplus of machinery or factory space available, businesses can rent or buy these at lower prices. The rate of interest tends to be stabilised at a particular point where demand curve for capital and supply curve of capital intersect at each other (i.e., at point E).

The determination price of capital is show in the following diagram:



OR is the equilibrium rate of interest. This is determined at point E. At point E the demand for investment curve (Di) for capital and supply of savings curve (Ss) intersect. If the interest rate is higher than OR, there will be excess supply of savings. (AB). In other words, if interest rate is higher than Off, the supply of capital will be higher than the demand for capital. This will pull the interest rate down. A fall in interest rate will continue until the demand for capital equals the supply of capital. That is, equilibrium is reached once again, If the interest rate is lower than Off, there will be excess demand for investment (CD), in other words, if the interest rate is lower than OR, the demand for capital will be higher than the supply of capital. This will raise the interest rate. The rise in interest rate will continue until the demand for capital equals the supply of capital. That is, equilibrium is reached once again. Thus, the interest rate tends to be stable at OR

Government Intervention in Market

In a socialist economy the government has an active role in the management of the economy. The government influences the economic activities within the country. It assumes a direct role in the development of industries. It shapes the complete climate of the business world. Thus, in a socialist economy, the government intervenes in the market Government intervention is the involvement of the government in the market to influence demand and supply. Its primary goal is to maximize a country's social welfare by correcting market failure.

Reasons for Government Intervention (Rationale)

There are important reasons for government intervention in markets. They are:

1. Market failures: Sometimes markets don't work properly on their own. This can happen when businesses don't provide enough of what people need or when they produce goods that harm people or the environment. The government intervention is needed to correct these failures.

2. Public goods: Some goods, like clean air or national defense, are important for everyone. But businesses wouldn't provide them because they can't make money from them. These are called public goods. The government provides these goods or services to ensure that everyone has access to them.

3. Socio-economic goals: Govt. intervention is required to attain the socio-economic goals. What undertakings to establish, how to run it, what products to produce, how to price them, how to distribute them are few of the questions that aim at social upliftment of the society. If left in the hands of private enterprises, social justice cannot be ensured.

4. Social welfare: Citizens need law and order, roads, electricity etc. These require huge amount of funds. These cannot be provided by private enterprises. Only the government can ensure social welfare.

5. Infrastructure: Power, fuel, transport, atomic energy, irrigation, railways, etc. provide a strong base for the development of the economy. If these sectors are left to private sector, they will focus only on how to make huge profit out of these. Hence these business activities have to be taken up by the government.

6. Development of backward areas: A country can achieve progress not only through the development of the urban areas but also through the development of backward areas. Usually private industrialists are not willing to initiate development in the rural and backward areas. Hence for the development of backward areas and for the all-round development of the country, the government should come forward.

7. Economic stability: Governments have to intervene in the market to stabilize the economy during times of crisis, like during recessions. If businesses are failing or unemployment is rising, the government can spend money or lower taxes to encourage people to buy more and businesses to invest. This helps prevent the economy from falling into a deeper crisis.

8. Protecting the environment: Businesses may not always take care of the environment. Businesses often focus on profits rather than the long-term health of the planet. Governments create rules and regulations, such as limits on pollution, to make sure companies don't harm the environment. Governments can also encourage the use of clean energy or the conservation of natural resources.

9. Public services: Public services like medical, health and educations have to be provided at subsidised rates to take care of public health. Subsidised services are not provided by the private business enterpreneurs. Hence, governments have to invest in these services to take care of weaker sections of the society and the public at large.

Role of Government

The government plays an important role in the economy. It makes sure the economy works fairly, safely, and smoothly for everyone. In the economic system the government plays the following roles:

A. Regulatory Role

In its regulatory role, the State improves the quality of economic performance by directing investment in socially desirable channels. The regulatory role of the Government consists of the following:

1. Reservation of industries in small-scale, public and co-operative sectors.

2. Regulates the entry of individuals in certain business activities through licensing

3. Regulates the conduct of business by regulating the product mix, promotional activities, working conditions of workers etc.

4. Regulates the business operations by imposing ceilings on profit margins, managerial remuneration, dividends etc.

5. Regulates the inter-relationship amongst enterprises by regulating the inter-corporate loans and investments, number of companies in which one person can be a director, appointment of sole selling agents etc.

B. Promotional Role

in its promotional role, the Government assists the development of various sectors, like industrial, agricultural, service sector etc. The Government performs the following promotional roles:

1. Builds the infrastructure for the economy, such as power, transport, telecommunication, marketing etc.

2. Provides various monetary and fiscal incentives to promote banking and commercial activities.

3. Provides incentives that help in covering risks for development of priority sectors of the economy.

4 Provides subsidies for purchase of land and other resources (power, water, machines etc.) for balanced development of the economy.

5. Extends credit to the poor at low rates of interest and helps in the removal of poverty.

C. Entrepreneurial Role

In its entrepreneurial role, the State sets up industrial enterprises that provide solid foundation to the economy. The Government assumes the entrepreneurial role in the following ways:

1. It provides strong industrial base for sustained economic development of the country.

2. It invests in industries of basic and strategic importance and public utility services, such as medical, health, education, power, fertilisers etc. These provide planned and rapid development of the economy.

3. It invests in sectors where private entrepreneur is unwilling or unable to invest because of huge utlay and lesser returns in the immediate short-run. For example, iron and steel, petro-chemicals, capital goods etc.

D. Planning Role

In its planning role, the State acts as 'welfare provider' by providing public goods or social goods to the society. Roads, electricity, energy, transport, communication, health, education etc. are provided by the State to all, rich and poor. Within the resource constrains, the State arrange various needs in the order of national priority and allocates the scarce resources to best meet the social and economic objectives.

Liberalisation, Privatisation and Globalisation

Liberalisation

In the early 1990 Indian economy was faced with serious problems such as large trade deficits, huge foreign debt, sharp decline in the external value of rupee, low economic efficiency, recession and so on. All the above factors led to fiscal and external imbalances. inflation, chronic unemployment and such other related consequences. To correct the imbalances and to solve the basic problems of poverty, unemployment and inequality, the Congress Government which has sworn into power in June 1991, decided to introduce some major economic reforms. These economic reforms are popularly called Structural Adjustment Programmes (SAP). By these, the government dreamed a total transformation of Indian economy. The New Economy Policy is a package of three main strategies: Liberalisation, Privatisation, and Globalisation.

Liberalisation

Liberalisation refers to the process of making the economy less controlled by the government. Before 1991, India had a lot of government rules and regulations that controlled how businesses worked. These rules made it hard for businesses to grow, compete, and innovate. The government also had strict control over imports, exports, a nd industries, which limited the economy's potential. In 1991, the Indian government decided to reduce these controls and allow businesses to operate more freely. Such a policy is called liberalisation. To implement the liberalisation policy, following reforms are made:

a) Financial sector reforms: These included deregulation of the banking sector, introduction of market-based interest rates, and liberalization of capital markets.

b) Industrial sector reforms: These included reduction of industrial licensing requirements, simplification of regulations, and encouragement of private sector participation.

c) External sector reforms: These consisted of liberalization of trade policies, reduction of import tariffs, and relaxation of restrictions on foreign exchange transactions.

e) Foreign exchange reforms: These reforms included introduction of market-determined exchange rates, easing restrictions on capital movements, and simplification of foreign exchange regulations.

f) Trade and investment policy reforms: Opening up of key sectors to foreign investment, streamlining investment procedures, and encouraging export-oriented industries were the reforms under these.

Objectives of Liberalization Policy

a) To increase competition amongst domestic industries.

b) To encourage foreign trade with other countries with regulated imports and exports.

c) Enhancement of foreign capital and technology.

d) To expand global market frontiers of the country.

e) To diminish the debt burden of the country.

Privatisation

Before 1991, the Indian government owned many large companies, such as airlines banks, and factories. These government-run businesses often became inefficient and made losses because they didn't have to compete with others. Privatisation is the transfer of the control and ownership of businesses from the public sector to the private sector. means a decline in the role of the government from public to private. It means transferring control of government-owned businesses to private individuals or companies. In short, privatisation is the process of involving the private sector in the ownership or operation of a state-owned enterprise.

The public sector enterprises had been experiencing challenges, such as low efficiency, low profitability, growing losses, political interference, lack of autonomy, labour issues, etc. In 1991, the government decided that privatising some of these businesses would make them more efficient and productive. Therefore, to address this situation government introduced privatisation in the economy.

Let us see how privatisation was done:

a) Selling government companies: The government began selling some of its businesses to private companies. This was done by selling shares of government-owned companies to the public through the stock market. When private companies took control, they worked harder to make the businesses profitable and efficient.

b) Encouraging competition: By selling these businesses, the government allowed private companies to enter various sectors like telecommunications, airlines, and banks. This increased competition. This led to better services, lower prices, and more innovation.

c) Better management: Private companies are often more focused on making profits and improving their businesses. By transferring control to the private sector, many of these companies became better managed and more successful.

Privatisation helped to make many industries more competitive and efficient, improving the overall economy. It also allowed the government to raise money by selling shares in these companies. This could be used for other important areas like infrastructure and education.

Objectives of Privatization

a) Improve the financial situation of the government.

b) Reduce the workload of public sector companies.

c) Raise funds from disinvestment.

d) Increase the efficiency of government organizations.

e) Provide better and improved goods and services to the consumer.

f) Create healthy competition in the society.

g) Encouraging foreign direct investments (FDI) in India.

Globalisation

Before 1991, India had a closed economy. This means that it was hard for foreign companies to enter India, and Indian companies had limited access to global markets. The government protected the country's industries by putting high taxes (called tariffs) on imported goods and limiting foreign investments. In 1991, India decided to open up its economy to the world. This is called globalisation.

Globalisation is the process of opening up the economy to the world, allowing countries to trade goods, services, and investments with each other. Globalisation can be defined as the integration of the national economy with the world economy. It enables a free flow of information, technology, goods and services, capital investments, and even people across different countries. It brings the trade, investments, and markets from various countries under one umbrella. It promotes a more lucid economy.

Let us examine how globalisation happened:

a) Opening trade: The government reduced tariffs (taxes on imports) and relaxed rules on imports and exports. This made it easier for businesses to trade with other countries and access goods and services from around the world.

b) Attracting foreign investment: India also started encouraging foreign companies to invest in the country. They offered incentives, such as allowing foreign companies to own a larger share of businesses in India. This brought in new technologies, management skills, and capital. This helped Indian businesses grow.

c) Encouraging exports: The government promoted exports by making it easier for Indian businesses to sell their products in other countries. This helped Indian companies reach bigger markets and increase their sales.

d) Increase in equity limit of foreign investment: Equity limit of foreign capital investment has been raised from the initial 40% to 51 to 100%.

e) Partial convertibility: To achieve the objectives of globalisation, partial convertibility of Indian rupee has been allowed for the following transactions:

i) Import and export of goods and services

ii) Payment of interest and dividend on investment.

iii) Remittances to meet family expenses.

Partial convertibility refers to the sale and purchase of foreign currency at the market price.

Globalisation helped India become more connected to the world. Indian businesses had access to new markets and technologies, while foreign businesses also benefited from entering a growing market like India. This led to more opportunities, higher growth, and a stronger economy.

Objectives of Globalisation

Objectives of globalisation are:

1. To increase foreign trade and to promote economic development

2. To share ideas, food, traditions, knowledge and culture of other parts of the globe.

3. To create more job opportunities

4. To acquire new technologies and innovations.

5. To promote collaboration along countries on global issues like climate change, health, and security.

6. To encourage private sector participation

7. To attract foreign direct investment

Indian Economy Before and After LPG

When India became independent in 1947, the economic base of the country was very small and the economy as beset with many problems like shortage of raw materials, deficiency of capital, bad industrialisation. Instability of economic life, inequality of distribution, poverty unfavourable balance of payment etc. This was very true in every sector of the economy. Industry, agriculture, trade, transportation etc. Since independence the government has been formulating and announcing economic policies to strengthen the national economy. India approached the International Bank for Reconstruction and Development (IBRD), popularly known as World Bank and the International Monetary Fund (IMF), and received $7 billion as loan to manage the crisis. Let us examine the features of Indian economy before and after LPG

Indian Economy before LPG

Before 1991, India had a closed economy with strict government control over many aspects of business, trade, and investment. The key features of the Indian economy at that time were:

1. Heavy Government Control

The government had a lot of control over the economy. Most industries were owned and run by the government. Private businesses had to get permission from the government to start and grow. This system was called the License Raj. The government also controlled prices, wages, and even what products could be made.

a) Licensing: To start a business, private companies needed a government license. This made it hard for businesses to grow or be flexible.

b) Limited competition: The government-owned companies were the main players in many industries. As a result, there was little competition. This made businesses inefficient and slow to innovate.

c) Focus on self-reliance: India's economy was focused on self-sufficiency. The government did not want India to rely too much on other countries for goods and services. So it imposed high tariffs (taxes) on imported products to protect local industries.

2. Economic Challenges

India faced several economic problems before 1991. Important among them are:

a) Slow economic growth: The economy grew at a slow pace, around 3-4% per year, Jobs, income, and the overall standard of living didn't improve much.

b) Low foreign investment: Due to strict rules, India did not attract much foreign investment. This limited the flow of new technologies, skills, and capital into the country.

c) Inefficiency in industries: Government-run industries were often inefficient, slow, and lacked competition. This led to poor-quality products and high prices for consumers.

d) Debt crisis: By the early 1990s, India was facing a balance of payments crisis. The country had borrowed a lot of money from other countries and was running out of foreign currency. India was unable to pay for essential imports like oil. This led to a serious economic problem.

Causes of the Balance-of-Payment Crisis

i) High Fiscal Deficit: The fiscal deficit in 1990 and 1991 was approximately 8.4% of GDP

ii) Impact of Crude Oil Prices and Gulf War: The invasion of Kuwait by Iraq in 1990 and 1991 caused a surge in oil prices

iii) High Inflation: Rapid increase in the money supply led to a rise in inflation from 6.7% to 16.7.

iv) Rising Internal Debt: As a consequence of the high fiscal deficit, the government's internal debt accumulated. It surged from 35% of GDP in 1985-86 to 53% of GDP in 1990-91.

v) Depleted Forex Reserves: By June 1991, India had less than $1 billion in forex reserves, just enough to cover three weeks of imports. This posed a significant challenge for conducting international business and worsened the balance of payment crisis.

vi) Capital Flight: Investors swiftly withdrew their investments from India as they perceived the worsening economic conditions. This aggravated the crisis, leading to a negative cycle of economic decline.

3. Isolated from the World

India's economy was not very connected to the global economy. International trade was limited due to high tariffs and strict rules. India focused more on its own production and self-reliance rather than engaging in trade with other countries.

Indian Economy After LPG

Let us see how indian economy has been transformed after LPG:

1. Vibrant Economy: Indian economy has definitely become a more vibrant economy. Overall level of economic activity has improved as indicated by GDP growth. The growth of GDP raised to as high as 8 per cent per annum.

2. Stimulant to Industrial Production: LPG policies have worked as a great stimulant to industrial production in the Indian economy. It is owing to these policies that IT industry in India has achieved global recognition.

3. A Check on Fiscal Deficit: Mounting fiscal deficit has been a serious threat to the process of investment in the Indian economy. From as high as 8.5 per cent of GDP has been brought down to around 3.5 per cent of GDP.

4. A Check on Inflation: Owing to a greater flow of goods and services in the economy, rate of inflation has been lowered. In the years 2011-12 to 2013-14, inflation was in the range of 6.9 per cent per annum For year 2017-18, it was around 2.9 per cent. During recent times, the inflation rates are fluctuating.

5. A Substantial Increase in Foreign Exchange Reserves: Depletion of forex reserves was one of the compelling reasons for the government to shift to LPG policies. After the adoption of LPG, foreign exchange reserves improved significantly.

6. Flow of Private Foreign Investment: Private foreign investment has taken a quantum jump after the adoption of LPG policies.

7. Recognition of India as an Emerging Economic Power: It is owing to LPG policies and the consequent rise in the overall level of economic activity, that India is now being recognised as an emerging economic power in the world.

8. A Shift from Monopoly Market to Competitive Market: Launch of LPG policies has caused a significant shift in the structure of the Indian Markets. Indian markets are now increasingly shedding its monopolistic character, and becoming more and more competitive in nature.

Unfortunately, LPG policies didn't produce results as expected. There are so many challenges before the Government. These are prominent in the areas of employment, agriculture, industry, infrastructure development, and fiscal management. Let's examine these negative impacts.

1. Neglect of Agriculture: Growth of GDP has primarily been owing to a growth of secondary and tertiary sectors. Substantial agricultural sector has suffered a serious neglect and its growth rate has depleted to a miserably low level (2-3 per cent per annum). Because of which India is witnessing a widening gulf between the rural and urban economies. It implies spread of poverty. In fact, slow growth of agricultural sector must ultimately hinder the process of growth of the industrial sector as well.

2. Urban Concentration of Growth Process: LPG policies have resulted in the concentration of growth process in urban areas. All MNCs are focusing only on urban areas, where they find conducive infrastructural facilities. This has further widened the 'rural-urban gulf.

3. Economic Colonialism: India suffered nearly 200 years of political colonialism during the British rule. Now while MNCs are expanding their economic control, we might suffer a sort of economic colonialism.

4. Spread of Consumerism: Spread of MNCs in the country as a consequence of LPG policies has resulted in a large-scale spread of consumerism. The Indian society is adapting itself to the western culture of spending through borrowing.

5. Lopsided Growth Process: LPG has accelerated the growth process of the Indian economy, but it is lopsided. It is not an inclusive growth process. It does not include all the sectors of the economy. Instead, it is increasingly relying on 'service sector' of the economy. Infact, it is just an 'IT-focused' growth process which is gradually over-shadowing the process of industrialisation, besides neglecting the farming sector.

It is alarming to note that, owing to liberalisation and globalisation, the Indian farmer is shifting to the production of cash crops for the foreign markets, causing a shortfall of domestic supplies of foodgrains.

6. Growing Employment: One of the serious challenges which Indian economy facing is rapidly growing unemployment. The LPG policies failed to generate sufficient employment opportunities in the country. While many new jobs were created, some older jobs, especially

in government-owned businesses, were lost as those industries became more efficient or were sold off.

7. Low Level of Industrial Growth: Industrial growth recorded a slow down due to: (a) cheaper imported goods, (b) lack of infrastructure facilities, (c) non-tariff barriers by developed countries, etc.

8. Environmental Issues: The focus on rapid growth led to environmental problems, such as pollution, depletion of natural resources, etc.

Firm and Social Responsibility

A business organisation cannot live in isolation. It is a part of the society. A business gets everything it requires from the society. It gets raw materials, labour, capital and information (ie, inputs) from the society. After converting the inputs into products, a business again depends on society for distributing the products to people. Thus, all the time, a business interacts with the society. It is rightly said that a business is the activity carried on by the people (entrepreneurs and managers), through the people (employees)and for the people (consumers and society). Thus, business uses society's resources to make profit. This means that a business depends on society for its functioning. Hence, business must give back to society something to enhance the latter's welfare. In short, the management of a business has some responsibility towards the society in which it is functioning.

Responsibilities towards Different Sections of the Society (Responsibilities to Stakeholders/Areas of Social Responsibility)

Business is responsible to the different sections of the society. Different sections of the society are known as stakeholders of business. They are people or organisations who are directly affected by the practices of an organisation. They have a stake (interest) in its performance. In short, stakeholders are those who have interest in the affairs of a business. The responsibilities of firm towards major stakeholders may be briefly outlined as below:

1. Responsibilities towards shareholders or stockholders (owners and other investors): The responsibilities of firm towards shareholders or investors are outlined as below:

(a) Provide an adequate or fair return regularly.

(b) Give accurate and complete information regarding the working and progress of the business.

(c) Protect shareholders' investments and rights.

(d) Maintain the share value in the market.

(e) Ensure growth, innovation and diversification.

2. Responsibilities towards employees or workers: The following are the responsibilities of firm towards employees and workers:

(a) Provide jobs to employees.

(b) Pay fair wages.

(c) Provide a clean and safe working environment.

(d) Provide welfare measures like canteen, transport, medical etc.

(e) Give proper training and education.

(f) Provide job security.

(g) Allow to participate in decision making.

(h) Assure opportunities for promotion, growth and development.

3. Responsibilities towards customers: Towards customers, the business has the following responsibilities:

(a) Treat customers fairly and honestly.

(b) Understand the needs of customers and satisfy them.

(c) Supply quality goods at reasonable prices.

(d) Give only true and fair information through advertising.

(e) Ensure availability of goods and services.

(f) Establish good relation with customers.

(g) Provide after sales services.

(h) Do not indulge in adulteration, hoarding, black marketing and profiteering.

4. Responsibilities towards creditors and suppliers: Towards the creditors and suppliers, firm has the following responsibilities:

(a) Provide accurate information regarding the financial health of the enterprise.

(b) Ensure a reasonable price for the articles supplied.

(c) Make prompt payment.

(d) Ensure fairness in the dealings.

(e) Place orders at the correct time.

(f) Treat the creditors and suppliers as business partners.

5. Responsibilities towards the Government: The responsibilities towards Government are as follows:

(a) Conduct business affairs in a lawful manner (i.e., obey the rules and regulations).

(b) Pay taxes and dues honestly.

(c) Follow fair trade policies and practices.

(d) Discourage unhealthy practices like bribing the Govt. officials to win undue favours.

(e) Co-operate with the Govt. to implement social activities.

(f) Invest surplus funds in Govt. bonds, infrastructural bonds etc.

6. Responsibilities towards society or community and environment: The responsibilities of the firm to the community may be performed in the following ways:

(a) Provide employment.

(b) Provide goods and services.

(c) Help in environmental protection.

(d) Minimise all kinds of pollution.

(e) Set up industries in backward areas.

(f) Conserve and utilise efficiently national resources for the public good.

(g) Participate in community activities and promote community welfare.

(h) Promote culture and art.

(i) Promote education.

(j) Preserve the ecological balance by planting trees etc.

(k) Save natural resources and wild life.

Business organisations indiscriminately dump waste products into streams and rivers, into the air, and on vacant land. Business enterprises are mainly responsible for all kinds of pollution. The Great Russian Novelist, Maxim Gorky once said, "Man knows how to fly in the air like a bird, he knows how to swim in the water like a fish, but alas! He does not know how to walk on the earth like a man".

Arguments For and Against Social Responsibility

Social responsibility is a debating topic. It is a controversial issue. It is a controversial issue in the sense that there are two schools of thought on the concept of social responsibility. Some people say that the corporate management should be responsible to the society. Some others opine that business organisation is purely an economic institution. Hence, it need not

look after the interests of the society. Thus, there are arguments for and against social responsibility.

A. Arguments for Social Responsibility

Business is an integral part of the society. Some business leaders believe that social responsibility is a means of achieving profitability. Carol Franklin (Former CEO of the World Wide Fund for Nature, Switzerland) said, "The purpose of business is to make the world a better place for our children. I do not think that the business of business is business. You can say that the purpose is to make a profit, but it must be an ethical profit, profiting the employees and the communities they are in, making products that are worthwhile and that do not harm the world. Only sustainable businesses that care for people, the planet and profit will survive." The management must keep in mind these three 'P's (people, planet and profit).

The important arguments offered in favour of business assuming social responsibilities are as follows:

1. Long run profits: If a firm wants to get maximum profits in the long run, it should serve the society. Such a company shall be admired by the general public and the Government. This brings more profits in the long run. In short, today's problems can turn into tomorrow's profits through discharge of social responsibility.

2. Prevents Government intervention: If the management does not meet the social responsibilities, then Government will come out with necessary regulations in the matter.

3. Possession of resources: Without society's support, business could not have built its resource base.

4. Better environment: Business can help in solving social problems. It can create a better quality of life. Thus, social responsibilities promote better environment. This is a must for the survival and growth of business.

5. Socio-cultural norms: Performance of social obligation helps to keep with the social and cultural values of society.

6. Consciousness among consumers: Growing consciousness among consumers has forced the business enterprises to voluntarily discharge their obligations towards the people.

7. Better productivity: When a business indulges in welfare activities to employees, their productivity will improve. Besides, a congenial and healthy atmosphere will prevail in the organisation.

8. Favourable for business: People with healthy environment, good health and education will make them good customers and employees. Recruitment of labour will be of higher quality. Turnover and absenteeism will be reduced. The society may reject an enterprise

which does not care for social welfare. Thus, when a company takes care of the interests of the community, the quality of life of the people will improve.

9. Long-term self-interest of business: Existence of any business is because of existence of various social organs like financiers, employees, customers, society as a whole, etc., and not otherwise. Therefore, business should provide satisfaction to all these organs on continuous basis for its continued existence.

10. Moral justification: Social responsibility has moral justification. This moral justification emerges from the fact that if any one takes something from others, he must give something to them in return. A business takes various inputs (money, materials, people, information, etc.) from the society and gives outputs (goods and services) to the society by using various inputs. System of taking inputs and giving outputs works well only if it fulfils social requirements.

A business should be more than simply a profit machine. Business is a partner in society along with the Government and the general population. In short, performing social responsibility is a means of earning greater profits.

B. Arguments Against Social Responsibility

Milton Friedman was a leading opponent of social responsibility. According to Milton Friedman, who won the Nobel Prize in Economics in 1976 (died in 2006), "The business of business is business". It implies the fact that the primary motive of a business is to earn profits. He further said, "There is one and only one social responsibility of business, i.e., to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game." He believed that Adam Smith's 'Invisible Hand" will do all the work to make everything better. Frank Bruglar of Bethelehem Steel Corporation has said, "We are not in business to make steel, we are not in business to build ship, we are not in business to erect building. We are in business to make money".

The major arguments against business assuming social responsibility are as follows:

1. Violation of profit maximisation: The primary motive of a business enterprise is to make profit. Profit is the primary measure of its success. If a business organisation involves in solving social problems, it cannot concentrate on its primary goal of profit maximisation.

2. Costs: Performance of social obligation involves costs. Business concern will not bear this burden by itself. It will pass on the burden to the consumers in the form of high prices for the goods and services. So ultimately, it is the consumers who bear the burden of social obligation.

3. Too much power: Business has already too much power. When it discharges social obligation, it may get additional powers. This enables the business to dominate over the major social institutions.

4. Lack of skills: Social problems are different from business problems. Management lacks social skills to solve social problems. Hence social problems should be handled by other institutions such as family, religious organisations or Government.

5. Lack of accountability: A business is primarily accountable to its owners. It is not accountable to any other for its social obligation. It is not possible to control the social performance of a business.

6. Burden on management: Management is overburdened with various tasks and functions. When social responsibility is shifted on their shoulders, their efficiency will be affected.

7. Theft of the owners' property: Businesses are owned by their shareholders. Money spent on CSR is the theft of the rightful property of the owners.

In short, business should produce goods and services efficiently and leave the solution of social problems to Government agencies and concerned individuals.

To conclude, a business is set up to make money by meeting the needs of the society. It is the creation of society. It is an integral part of the society. Social welfare and earning of profit should go hand in hand. Business is both an economic and social institution." Profit through Service" should be the slogan of today's business.

Macroeconomic Policies

Macroeconomic policies include mainly fiscal policy and monetary policy.

Fiscal Policy

Fiscal policy is an important tool of macroeconomic policy. It has the ability to influence key variables of the economy. A business manager uses it for making various strategic decision

Meaning of Fiscal

The term 'fiscal' has been derived from the Greek word 'fisc'. It means a basket to symbolise the public purse. Thus fiscal policy means the policy related to the treasury of the Government.

Fiscal policy means the use of taxation and public expenditure by the Govt. for stabilisation or growth. It is a policy formulated by the Govt. of a country in which taxes, expenditure, and financial operations are used as a tool to attain certain national goals

Thus, fiscal policy refers to the policy relating to taxation, expenditure and public debt. In short, fiscal policy is concerned with the budget receipts and expenditures of the Government.

Instruments or Tools of Fiscal Policy

These are various tools or instruments of fiscal policy. Important instruments may be discussed here.

1. Budget: Fiscal Policy operates through budget. It is a financial description of the fiscal policies of the Govt. It exercises control over size and relationship of Govt. receipts and expenditures.

2. Taxation: Taxation is a powerful instrument of fiscal policy in the hands of public authorities. Tax is the most important source of public revenue. Taxes collected are used for the common benefit of the public. There are two types of taxes, namely, direct tax and indirect tax.

During depression or recession, the Govt. will reduce taxes. Then there would be more funds with the people for consumption and investment purposes. This will ultimately result in the increase of spending activities. This will tend to increase effective demand and reduce the deflationary gap.

3. Public expenditure: Public expenditure refers to the expenses which the Govt. incurs for maintaining itself as well as the economy as a whole. Public expenditure can improve the productive efficiency of the economy and improve productivity of its working class. It can also help in reducing income inequalities.

4. Public debt: When the Govt. finds it difficult to match its public revenue with public expenditure, it relies on public debt in the event of a sudden fall in the public expenditure (may be because of war, natural calamity, outbreak of epidemic like Covid-19 etc.). Public debt simply means Govt. borrowing. Public debt is a good fiscal weapon to fight against inflation and deflation.

5. Deficit financing: When the Govt, expenditure exceeds the Govt, revenue, it resorts to deficit financing. Deficit financing involves either withdrawing cash balances held in the central bank or by borrowing from the central bank. When the Govt. borrows from the central bank, the central bank prints money and gives them to the Govt. against Govt. securities. During depression, deficit financing helps to raise the level of income and employment. The major objection against deficit financing is that it leads to inflation.

Pros or Arguments (Advantages) For Fiscal Policy

The arguments for fiscal policy are:

1. It mobilises resources for economic growth.

2. It can promote economic growth.

3. It ensures equitable distribution of income and wealth.

4. It ensures economic stability.

5. It can increase employment opportunities.

6. It can maintain equilibrium in the balance of payments.

7. It helps to achieve optimum allocation of resources.

Cons or Arguments Against Fiscal Policy

The arguments against fiscal policy are as follows:

1. It will take a long time to bring desired result.

2. The success of fiscal policy will depend on the ability of the public authority to frame the correct size and nature of fiscal policy and also to determine the timing of its application.

3. In most of the developing countries, the tax laws are highly complicated with various types of exemptions and deductions.

4. If the funds generated through taxes and other sources are insufficient, the authorities have to rely on public debt.

5. In democratic countries, execution of fiscal policies is a time consuming process.

Monetary Policy

Monetary policy is formulated and implemented by the monetary authorities of the country. It operates through changes in the quantity of money. Thus its immediate impact is felt in the money market.

Meaning of Monetary Policy

Monetary policy is formulated and implemented by the central bank of a country through wide network of financial institutions. Monetary policy refers to the tools used by the Govt. through the central bank to control the supply of money.

Thus, monetary policy is a policy in which the monetary authority of a country, generally the central bank, controls the demand and supply of money.

Instruments or Tools of Monetary Policy

There are a number of instruments or tools of monetary policy. These can be used by the central bank to control and regulate the money supply. The tools of monetary policy are also called weapons of credit control. These are the nuts and bolts of monetary policy. All instruments or tools of monetary policy can be classified into two-quantitative techniques and qualitative techniques.

Quantitative Techniques

Quantitative measures are used for controlling and regulating the demand and supply of money. These are meant to regulate the overall level of credit in the economy through commercial banks. Some of the important quantitative measures include bank rate policies, open market operations, cash reserve ratio and statutory liquidity requirement.

1. Bank rate policy: When commercial banks need cash, they can borrow from the central bank. The commercial banks can borrow money by rediscounting their bills with central bank or by taking loans on approved securities. For this, the central bank charges from commercial banks a rate. This rate is known as bank rate. Thus bank rate is the rate at which the central bank discounts or rediscounts the bills of exchange presented by commercial banks. When the central bank finds that inflationary pressures have started emerging within the economy it will raise the bank rate. When the central bank raises the bank rate, the commercial banks also raise their lending rates. As a result, borrowers borrow less from the commercial banks. Thus money supply is reduced. This discourages investment. This in turn affects production and employment. Ultimately, the income of the people is reduced and price level is brought under control.

2. Open market operations: Open market operations refer to purchase and sale of securities by the central bank in the open market. When the prices are rising and there is need to control them, then central bank will sell securities. For purchasing the securities, the individuals and institutions will withdraw money from the commercial banks. Thus the deposits of the commercial banks are reduced. Hence they are not in a position to lend more to the people and business community. Thus credit contracts and prices fall.

3. Change in cash reserve ration: Every bank is required by law to keep a certain percentage of deposits with the central bank as reserve. When prices are rising, the central bank raises the reserve ratio. Now banks are required to keep more with the central bank. As a result, their reserves are reduced. They lend less. Investment, output, employment, income and demand fall. Ultimately prices fall.

4. Change in statutory liquidity ratio: Apart from CRR, commercial banks are required to keep with themselves in the form of liquid assets. This is known as SLR. The liquid assets can include cash reserve, gold, and Govt. securities. When the SLR is raised, it leads to a reduction in the lending capacity of commercial banks. That is, they lend less. This leads to contraction of credit. This ultimately leads to contraction of investment, production, employment, income and prices in the economy.

Qualitative or Selective Techniques

Selective credit control measures are meant to regulate the flow of credit for specific purposes. They control the direction and distribution of credit in the economy. Following are some of the qualitative credit control measures:

1. Rationing of credit

2. Changing margin requirements

3. Regulation of consumer credit

4. Persuading commercial banks to take measures from time to time as per the directions of the central bank.

5. Taking direct action when some commercial banks do not co-operate with the central bank in controlling credit.

Pros or Arguments for Monetary Policy (Merits)

1. It stabilises the exchanges rate

2. It stabilises the price level

3. It contributes to rapid economic growth

4. It helps to attain full employment

5. It regulates the velocity of circulation of money

Cons or Arguments against Monetary Policy (Demerits)

1. If the money market is unorganised or underdeveloped, it will not make an impact.

2. It cannot be successfully implemented if the banking system is not well developed.

3. If there is inflation, it will not work properly

4. It is difficult to achieve the objectives of monetary policy, if the country Gas adopted deficit financing.

5. If there are huge imports and unfavourable balance of payment, it may not be effective.

Quantitative Easing (QE)

QE is a type of economic tool used by a country's central bank. The objective of this tool is to help boost the economy when its struggling.

Central banks use QE in situations where normal methods of controlling the economy, like lowering interest rates, aren't enough. This often happens when the economy is in a recession or when there is very low inflation. In such cases, traditional tools, like lowering interest rates, may not be effective because interest rates might already be so low that they can't be reduced any further.

Meaning of Quantitative Easing

Quantitative easing (QE) is a monetary policy that a central bank may adopt in times of economic instability to introduce more money into circulation. This strategy was first introduced by the Bank of Japan as a means of injecting "new money" into the economy, thereby "easing" the (low) quantity and expanding the central bank's balance sheet.

To execute quantitative easing, central banks buy government bonds and other securities, injecting bank reserves into the economy. Increasing the supply of money provides liquidity to the banking system and lowers interest rates further. This allows banks to lend with easier terms.

Thus, money that was once in the government's reserves is now in circulation, without the Fed literally printing money. Quantitative easing can involve a combination of both monetary and fiscal policies.

Objectives of QE

Following are the main objectives of QE

1. To increase the money supply so as to boos economic growth

2. To reduce interest rates so that business and people can borrow at lower cost (ie loans become cheaper).

3. To encourage spending and investment so that the economy grow

4. To prevent deflation (deflation means falling of prices and people delay purchases in hopes of further fall in price)

5. To help raise the prices of financial assets like stocks and bonds.

How Does QE Work?

QE works in the following manner:

1. Creating money: The central bank does not physically print more cash, but instead creates digital money. This money is then used to buy bonds or other financial assets from banks or financial institutions.

2. Buying bonds: When the central bank buys bonds, it gives money to the banks in exchange for those bonds. This increases the money supply in the economy. As banks get more money, they are more willing to lend it to businesses and people.

3. Lowering interest rates: By buying bonds, the central bank increases their prices, which lowers interest rates on those bonds. This leads to lower interest rates throughout the economy, making it cheaper to borrow money. For example, businesses might borrow money to build new factories, or people might borrow money to buy houses or cars.

4. Encouraging spending: With more money available and lower interest rates, businesses and consumers are more likely to spend and invest. This can help the economy grow and create jobs.

Advantages of QE

QE has the following advantages:

1. Economic growth: QE injects' more money in circulation without printing currency. This leads to economic growth for a short period.

2. Encourages spending: It encourages spending. This help in creating jobs and in economic growth.

3. Reduces the risks of banks: It reduces the risk for banks lending money to people.

4. Boosts asset prices: It boosts the prices of financial assets like stocks, bonds etc.

Risks or Disadvantages of QE

Following are the risks or disadvantages of QE:

1. Causes inflation: If too much money is created, it can lead to higher prices (inflation). This is because when there's more money in the economy, people may start spending more. This pushes prices up.

2. Causes stagflation: Stagflation refers to a rise in the cost of goods and living without yielding sufficient economic growth. When the central bank purchases financial assets, they are doing so to make it easier for others to make investments. However, during a great recession or global financial crisis, people are less likely to spend money. So there is no guarantee that the method will work.

3. Reduces the value of domestic currency: Quantitative easing may devalue the domestic currency as the money supply increases. A devalued currency can help domestic manufacturers because the goods they export become cheaper in the global market. But a falling currency value makes imports more expensive. This increases the cost of production and consumer price levels.

4. Leads to wealth inequality: QE tends to help people who already own assets like stocks or real estate, as these prices go up. This can make the rich even richer while the poor or those without assets don't benefit as much. This may further lead to social and economic problems.

5. Diminishing Returns: Over time, the effectiveness of QE may decrease. If the central bank continues to inject more money into the economy without seeing the expected improvements in the economy, the economy may become less responsive to QE. This is

because businesses and consumers may not want to borrow more money if they are already in debt or if economic conditions do not improve.

Balance of Payments

No country is self-sufficient. Every country is dependent on other countries for some goods and services. This means that every country undertakes a wide variety of economic and commercial transactions (export and import of goods and services) with rest of the world. The transactions between a country and rest of the world involve cross-border movement or flow of funds. Besides, there are flows of funds on capital account for working capital (short term funds) or for investment (long term fund). These flows of funds are reflected from a country's balance of payments.

Meaning of Balance of Payment

Balance of payment simply refers to the summary of all transactions between a country and other countries for a given period. It is a record of all the financial transactions made between a country and the rest of the world. It shows how money flows in and out of the country through imports, exports, investments, loans, and other international financial activities.

Balance of Payment (BOP) is like a financial record that tracks all the money coming into and going out of a country. It helps to understand the economic relationship a country has with the rest of the world.

Thus, BOP shows the flow of a country's revenue from other countries and its payments to other countries for a given period of time. In short, BOP tells us whether a country is earning more money from the rest of the world than it is spending or borrowing.

Components of BOP

There are three components of BOP. They are: (a) current account, (b) capital account, and (c) official reserve account. These may be explained as below:

Current Account

The current account includes import and export of goods and services. It is a record of trade in goods and services among countries. Only transactions of current nature resulting in incomes or expenditure (and not resulting in asset formulation) are recorded on the current account. A surplus in the current account represents an inflow of fund while a deficit represents an outflow of funds. The various items included in the current accounts are as follows:

1. Exports and imports: This includes the money a country earns from selling goods and services to other countries (exports), and the money spent on buying goods and services from other countries (imports).

2. Income: This includes payments a country receives or makes for things like salaries, wages, or dividends (profit sharing) on investments. For example, if an Indian company earns income from its branch in the USA, it will be recorded in the income section.

3. Current transfers: This involves money that flows into or out of the country without any exchange of goods or services, such as remittances (money sent by workers abroad to their families back home), or foreign aid (help from other countries).

Capital Account

The capital account consists of capital transactions. The capital transactions are short-term capital flows and long-term capital flows. Capital comes into the country by borrowing, sale of overseas assets and investments in the country by foreigners. These items are referred to as capital inflows and are recorded as credit items in the balance of payments. Capital inflows are, in effect, a decrease in the country's holding of foreign assets or an increase in liabilities to foreigners. That is why capital inflows are recorded as credits. Similarly, capital leaves the country due to lending, buying of overseas assets and purchases of domestic assets owned by foreign residents. These items represent capital outflows. In short, the capital account records the money flows related to investments, loans, and capital transfers.

The various transactions included in the capital accounts are as follows:

1. Foreign direct investment (FDI): FDI occurs when a foreign company invests in businesses or assets in the country.

2. Foreign portfolio investment (FPI): When foreign investors buy shares, bonds, or other financial assets in a country, it is called FPI.

3. Loans and borrowings: Money that a country borrows from or lends to other countries is recorded here.

4. Changes in foreign exchange reserves: This shows how the central bank of a country is buying or selling foreign currencies to manage the value of its own currency.

Official Reserve Account

If the overall BOP (sum of current account, capital account and errors and omissions) is surplus, the surplus amount is used for used for repaying the borrowings from the IMF Then the balance is transferred to the official reserve account. Consequently official reserve account (or official settlement account) is increased. On the contrary, when the overall balance is found deficit, the monetary authorities arrange for the capital flows (from external sources like borrowing from IMF or official borrowings) to make up the deficit.

Importance of BOP

The importance of BOP can be understood from the following points:

1. Economic health: BOP provides important information about a country's economic health. A country that has a trade surplus (exports more than it imports) is generally in a good position. This means it is earning more money from other countries. On the other hand, a trade deficit (importing more than exporting) might signal that the country is relying too much on borrowing or foreign investments to pay for its imports.

2. Currency value: A country's BOP affects its currency value. If a country has a lot of foreign investments or exports more than it imports, it will likely have a strong currency because people need to buy the country's currency to pay for goods or investments. If a country has a deficit, the value of its currency may weaken.

3. Government decisions: The government and central bank use the BOP to make decisions about economic policies. For example, if a country has a large deficit, the government might try to reduce imports or increase exports to balance the BOP.

4. International relationships: The BOP helps in understanding a country's financial relationship with the rest of the world. If a country has a lot of foreign investments or owes money to other countries, it will reflect in the capital account and can affect how other countries view its financial stability

Differences Between Balance of Payment and Balance of Trade

Balance of Payment (BOP) and Balance of Trade (BOT) are different concepts Following are the important differences:

1. The Balance of Payment is a broader concept that records all financial transactions between a country and the rest of the world. It includes not only trade in goods and services but also money flows related to investments, loans, and remittances. The Balance of Trade is a smaller part of the Balance of Payments. It refers specifically to the difference between the value of a country's exports and imports of goods.

2. There are mainly two components of BOP. They are current account and capital account. Current Account includes trade in goods and services, income from investments, and transfers such as remittances. Capital Account tracks the flow of capital in and out of the country (e.g., investment in assets). Balance of Trade, on the other hand, looks at the exports and imports of goods. It does not account for services, income from investments, or financial transactions.

3. Balance of Payment provides a full picture of all economic transactions between a country and the outside world. It tracks all financial flows, including both trade in goods and services and other economic activities like investments, loans, and foreign aid. But, Balance of Trade focuses specifically on trade in physical goods. It does not include services like tourism or banking, nor does it consider money flows from investments or loans.

4. A country can have a BOP surplus or deficit. A surplus means more money is coming into the country than going out. A deficit means more money is going out than coming in. The balance of trade is considered positive (a surplus) if a country exports more goods than it imports. It is considered negative (a deficit) if it imports more goods than it exports.

Exchange Rates

Exchange rates are important not only for business organisations but also for governments and individuals. Any change in exchange rates in either direction influences their cash flows. So everyone is interested to know how exchange rates move and what factors influence them.

Meaning of Exchange Rate

Currencies are traded in the foreign exchange market at an exchange rate. Exchange rate is the price of one currency in terms of the other. It is the price at which one national currency can be converted into another national currency. Exchange rate specifies the number of units of a given currency that can be purchased with one unit of another currency. Suppose an Indian firm buys goods from an American firm. The Indian firm needs to know how many dollars can be purchased for a rupee. This enables the firm to calculate how many rupees it will need to pay the American firm's price in dollars

Foreign Exchange Rate Quotation

A foreign exchange quotation is the price of a currency expressed in the another currency. The quotation can be either direct or indirect.

Direct Quotation (Direct Quote)

A direct quote gives the units of local currency per unit of foreign currency. For example, 68 US $1, is a direct quotation for US dollars in India. This means one dollar could be bought for 68 rupees. Thus direct quote shows the number of indian (home) rupees required to buy one unit of foreign currency.

The direct quote is one in which the home currency fluctuates (variable) and the foreign currency against which it is quoted remains constant (fixed). Direct quote is denoted by H/F (H means home currency and F means foreign currency). It is read as currency H in terms of currency F.

For example, 75/15. It means that if we want to buy 1 US dollar, we have to pay 75 INR. Suppose the direct quote is ₹76/1$. This means if we want to buy 1 US dollar, we have to give 76 INR. Thus, the value of INR has depreciated against US dollar. Here, INR fluctuates (75 to 76) while US dollar remains constant (remains at 15). In short, exchange rate expressed in terms of domestic currency per unit of foreign currency is called direct quote.

Indirect Quotation (Indirect Quote)

The indirect quote represents the number of units of foreign currency that can be purchased for one Indian rupee. Thus, in case of indirect quotation, exchange rate is given in terms of units (variable) of foreign currency as equivalent to a fixed number of units of home currency. For example, in India 0.0147 US $ = 1 rupee (i.e., 1/68=0.0147). This means with one Indian rupee, we can buy 0.0147 US dollar Thus indirect quote expresses the foreign currency per home currency. Indirect quotation is made in the U.K. For example, in London a quotation may be made as $ 1.55 = £ 1. The indirect quote is one in which the foreign currency fluctuates (variable) and the home currency remains constant (fixed). Indirect quote is denoted by F/H. It is read as currency F in terms of currency H. Suppose the indirect quote is 0.013335/1 INR (i.e., 1/75 INR). This means 1 INR is equal to 0.01333 US dollar only. Suppose the indirect quote is 0.01316 (i.e., 1/76 INR). This implies that 1 INR is equal to 0.01316 US dollar only. Thus, the value of INR has depreciated from 0.01333 to 0.01316. Here INR remains constant (at ₹1) and US dollar fluctuates (from 0.01333 to 0.01316). In short, indirect quote is when a unit of home currency is expressed in terms of a foreign currency.

It may be noted that: (a) the direct quote is the reciprocal of the indirect quote, (b) the indirect quote is the reciprocal of the direct quote. We can convert the direct quote into indirect quote by dividing1 by the direct quote. Similarly, indirect quote can be converted into direct quote by dividing 1 by the indirect quote.

Cross Exchange Rate (Cross Rate)

Cross rate is an exchange rate of two currencies expressed in a third different currency. For example, the exchange rate between euro and the yuan expressed in yen. A British trader dealing in Mexican pesos and euros will trade them at cross rate (between pesos and euros expressed in pound).

In the US, the term 'cross exchange rate' refers to the relationship between two non-dollar currencies. The value of any non-dollar currency in terms of another is its value in dollars divided by the other currency's value in dollars.

Thus, a cross rate is the exchange rate between two currencies that are each expressed in terms of a third currency. The third currency is called the vehicle currency. Suppose there are three currencies A, B and C. Currency B is expressed in terms of A. Currency C is also expressed in terms of A. Therefore, currency A is the vehicle currency. But currencies B and C are not expressed in terms of each other. A cross rate is the exchange rate between B and C using the exchange rates between currencies A and B and currencies A and C (the exchange rate between B and C is not expressed). That is: B/C = B/A x A/C

Spot Exchange Rate (Spot Rate)

The exchange rate at which the transaction takes place in the spot market is known as spot rate. It is the rate quoted for immediate delivery. In short, rate used for the spot transaction is spot rate.

Spot rates are usually published in all leading newspapers daily. The spot exchange rate is determined by immediate market demand for and supply of foreign exchange.

Forward Exchange Rate (Forward Rate)

The rate at which the forward exchange contract is agreed upon is called the forward rate. It is the rate quoted by foreign exchange traders for the purchase or sale of foreign exchange in the future. The usual forward exchange contract is for 1 month, 3 months, 6 months, 9 months and 1 year. Thus, the forward rate is the rate at which two parties agree to exchange currencies on a specified future date. The rate is agreed upon at the time the contract is made, but payment and delivery take place at a future date.

Gross Domestic Product (GDP)

GDP is a measure of the total value of everything produced in a country. It helps to show how healthy an economy is and allows for comparisons between countries.

Meaning of Gross Domestic Product (GDP)

GDP is the money value of all final goods and services produced by normal residents (nationals residing in a country) in an accounting year in the territory of a country. Thus, it does not include the net income from abroad. In short, GDP is the total value of all goods and services produced in a country within a specific time period, usually a year or a quarter. GDP is like the overall scorecard for a country's economy. It tells us how much economic activity is happening in a country.

Measurement of GDP

There are three methods of measuring GDP. They are:

1. Production method: Under this method, GDP is calculated by adding the market value of all goods and services produced in the country.

2. Income method: In this method, GDP is calculated by adding all the income people earn from production, i.e., total of wages and salaries, profits, rents, and interests and dividends.

3. Expenditure method: Under this method, GDP is measured by adding the amount spent by people, businesses, and the government on goods and services. It adds up things like consumer spending, business investments, government spending, and net exports (exports minus imports).

Nominal versus Real GDP

When GDP is measured in current prices, it is called "nominal GDP". It is also called "GDP at current prices". It means that the goods and services included in GDP are valued at prices of the year for which GDP is being estimated. For example, when GDP for the year 2024-2025 is estimated at the prices prevailing during 2024-2025, it is GDP at current prices. Thus, inflation is not adjusted.

Nominal GDP adjusted for inflation (price level changes), in relation to some chosen year (called base year) prices, is called "real GDP". Thus, real GDP is the nominal GDP adjusted for inflation. Suppose the base year in India at present is 2016-2017. GDP of 2024-2025 estimated at 2016-2017 prices is called real GDP of 2024-2025. Real GDP is also called "GDP at constant prices".

GDP Deflator

The GDP deflator is a measure of the price level of all goods and services included in a country's Gross Domestic Product (GDP). It helps to determine how much of the change in GDP from one year to the next is due to changes in prices, rather than changes in the actual quantity of goods and services produced. In simple terms, the GDP deflator shows how much the prices of everything produced in an economy have increased or decreased. The GDP deflator is calculated as follows:

(Nominal GDP / Real GDP) x 100

For example, if the GDP deflator is 120, it means that, on average, prices have increased by 20% compared to the base year. It's a broad measure of inflation and helps to distinguish between changes in production and changes in price levels within an economy.

CHAPTER – 5

PRACTICALS FOR SKILL DEVELOPMENT

Practical sessions play a crucial role in helping students develop essential skills that go beyond textbook learning. These sessions allow students to apply theoretical knowledge to real-world situations, providing them with a deeper understanding of the subject matter. Following are some of the key reasons why practical sessions are important:

1. Hands-on experience: Practical sessions give students the chance to work with real data, tools, and techniques used in the industry. This hands-on experience helps students understand how concepts are applied in the real world, making learning more relevant and effective.

2. Problem-solving skills: In practical sessions, students often face real-life scenarios that require problem-solving. By working through these challenges, students learn how to think critically and make decisions based on available information. This prepares them for real-world issues they may encounter in their careers.

3. Confidence building: Working on practical tasks allows students to build confidence in their abilities. As they successfully complete tasks and solve problems, they gain the self-assurance needed to handle complex situations in their future careers.

4. Skill development: Practical sessions focus on developing key skills such as teamwork, communication, time management, and technical proficiency. These are important not only for academic success but also for students' professional growth.

5. Bridging the gap between theory and practice: Often, students may find it difficult to connect theoretical concepts with real-world applications. Practical sessions help bridge this gap by showing students how what they learn in the classroom can be used to solve actual business or industry problems.

Case Studies

Case studies are a key tool accounting faculty use to help students grasp how the information they get from textbooks or lectures applies to real-world settings. Case studies require a higher level of thinking and analysis. No doubt, case study deepens students preparation for their careers, in classes from introductory to master's level, faculty use case studies to enhance students' understanding and better engage them in the subject matter

A case study is an in-depth study of one person, group, or event. Case study is a story or scenario, often in narrative form, created and used as a tool for analysis and discussion. in a case study, nearly every aspect of the subject's life and history is analyzed to seek patterns and causes of behaviour. Case studies can be used in many different fields, Including psychology, medicine, education, anthropology, political science, social work, accounting and

business economics. Case studies are best used in situations where it would be difficult or impossible for you to conduct an experiment.

Case study analysis in business economics helps students understand how economic concepts apply to real-world business situations. By studying actual cases, students can see how businesses face challenges like supply and demand, pricing, competition, etc. This practical approach allows them to use economic theories to solve problems, make decisions, and predict outcomes. It also helps students develop critical thinking skills. In short, case study analysis in business economics prepares students for real-world business problems, making their learning more relevant and useful for their future careers.

Case Study 1: "The Local Vegetable Market"

In a small town, there are many farmers selling the same types of vegetables, like tomatoes, carrots, potatoes etc., at a market. All the farmers sell similar quality products, and there is no difference in the vegetables they offer. The prices of these vegetables are determined by the overall supply and demand in the market. This means if there are many vegetables available, the price may go down, and if there are fewer, the price goes up. Customers have many choices, and they usually pick the vegetables that are cheapest or freshest. This market is an example of a competitive market because: (a) There are many sellers (farmers), (b) The products are identical (same types of vegetables), (c) Prices are determined by supply and demand, not by individual sellers.

Questions:

1. Why is the vegetable market an example of a competitive market?

2. How do prices in a competitive market get determined?

3. What might happen if one farmer tries to raise the price of their vegetables?

Solutions:

1. The vegetable market is an example of a competitive market because there are many sellers and buyers, the products are identical, customers can easily choose between them, etc.

2. In a competitive market, prices are determined by supply and demand. If there is a lot of supply (many vegetables), prices fall. If there is less supply, prices rise.

3. If one farmer tries to raise their vegetable prices, customers will likely buy from other farmers with lower prices. This means the farmer will probably not be able to sell as many vegetables and might have to lower the price to stay competitive.

Case Study 2: "The Restaurant Industry and Employee Power"

In a small town, there is a popular restaurant that has been struggling to find workers. The restaurant has many customers, but not enough staff to serve them. This gives the employees who work there more power. Because there are fewer workers available, they can ask for higher wages or better working conditions. For example, one waiter may ask for a higher salary, and the restaurant might agree to keep them because they don't want to lose their good employees. On the other hand, if there were more workers available than jobs, the employer would have more power to set lower wages and working conditions. This situation shows how employees can have power in the labour market when there is a shortage of workers.

Questions:

1. Why do employees have more power in this restaurant situation?

2. How can the employer lose power in the labour market?

3. What might happen if there were more people looking for jobs than there are restaurant positions?

Solutions:

1. Employees have more power in this restaurant situation because there is a shortage of workers, and the employer needs staff to keep the restaurant running. This gives workers the ability to ask for higher wages or better conditions.

2. The employer loses power in the labour market when there is a shortage of workers. In such situations, the employer must offer higher wages or improve conditions to attract and keep employees.

3. If there were more people looking for jobs than there are positions, the employer would have more power. They could offer lower wages because there would be many workers willing to accept the job.

Case Study 3: "Rational Choice in Buying a Smartphone"

Scenario: Prasad is looking to buy a new smartphone. He has two options:

1. Phone A: Costs 50,000 and has all the features he needs, like a great camera, long battery life, and enough storage.

2. Phone B: Costs₹60,000, but it has some extra features that Prasad doesn't really care about, like a faster processor and a larger screen.

Prasad has a budget of 60,000 and needs to make a decision.

Questions:

1. What is the rational choice for Prasad to make?

2. How would Prasad's decision change if his budget was only 55,000?

3. Why is rational choice important in decision-making?

Solution:

1. Rational Choice: Prasad will choose Phone A because it meets all his needs for a lower price. According to the rational choice theory, Prasad will pick the option that gives him the most value for the least amount of money. Since Phone A has everything he needs and costs less, it is the more rational choice.

2. If Budget Was 55,000: If Prasad's budget was only 55,000, he would still choose Phone A. This is because Phone A costs 50,000, leaving him with 5,000 in savings. Phone B, at 60,000, would be outside his budget, making it an irrational choice.

3. Why Rational Choice is Important: Rational choice helps people make decisions that maximize their benefits while minimizing their costs. In this case, by choosing Phone A, Prasad makes the best use of his budget and ensures he gets the features he values without overspending.

Case Study 4: "Marginal Utility in Buying Pizzas"

Scenario: Susmitha loves pizza and decides to buy pizzas for dinner. She has 3,000 to spend. The price of one pizza is 1,000. She buys three pizzas, one at a time.

(a) The first pizza gives her a lot of satisfaction because she's very hungry.

(b) The second pizza still gives her satisfaction, but not as much as the first one.

(c) The third pizza gives her the least satisfaction because she's starting to feel full.

Questions:

1. What is the concept of marginal utility in this case?

2. How does Susmitha's satisfaction change as she buys more pizzas?

3. Should Susmitha buy more pizzas based on marginal utility?

Solution:

1. Marginal Utility Concept: Marginal utility is the additional satisfaction or happiness Susmitha gets from consuming one more pizza. For Susmitha, each pizza provides less satisfaction than the previous one.

2. Satisfaction Changes:

- The first pizza gives her the highest satisfaction because she's very hungry.
- The second pizza gives her some satisfaction, but not as much as the first one.
- The third pizza gives her the least satisfaction because she is getting full.

3. Should Susmitha Buy More Pizzas: Based on marginal utility theory, Susmitha should stop buying pizzas when the satisfaction from an additional pizza is no longer worth the cost. Since the third pizza gives her the least satisfaction, Susmitha should not buy a fourth pizza, as the marginal utility is too low to justify the cost.

Case Study 5: "Industrial Relations in a Manufacturing Company"

Scenario: A factory produces toys, and the workers are represented by a union. Recently, workers have complained about long working hours and insufficient breaks. The factory management has noticed a decrease in productivity and an increase in worker complaints. The workers are threatening to strike unless their concerns are addressed. The management decides to hold a meeting with the union representatives to discuss the issues.

Questions:

1. What is the role of industrial relations in this scenario?

2. How can the factory management resolve the situation without a strike?

3. Why is it important for the factory to maintain good industrial relations with its workers?

Solution:

1. Role of Industrial Relations: Industrial relations involve the relationship between workers (often represented by unions) and management. In this case, the union is acting as the workers' representative to communicate their concerns about working conditions. Management must listen and respond to avoid conflict.

2. Resolving the Situation: The management can resolve the situation by:

(i) Offering better working hours or more frequent breaks.

(ii) Negotiating a compromise that satisfies both sides.

(iii) Holding regular meetings to ensure workers' concerns are addressed before they lead to larger issues like a strike.

3. Importance of Good Industrial Relations: Maintaining good industrial relations is important because it helps create a peaceful work environment, improves productivity, and reduces the chances of strikes or other disruptions. Satisfied workers are more likely to be productive. This will lead to a healthier business.

Case Study 6: "Low Pay and Discrimination in a Factory"

Scenario: In a clothing factory, two groups of workers perform similar tasks. One group consists mostly of women, while the other is made up of men. The women are paid 120 per hour, while the men are paid 150 per hour for doing the same work. The female workers feel they are being unfairly treated and complain to management, claiming gender discrimination. They also mention that their pay has not been increased in years, while the male workers' wages have gone up.

Questions:

1. What are the issues of low pay and discrimination in this case?

2. How should management address the concerns of the female workers?

3. Why is it important for the factory to address these issues?

Solution:

1. Issues of Low Pay and Discrimination: The female workers are facing both low pay and discrimination. Despite doing the same work as the male workers, they are paid less, which is unfair and likely violates equal pay laws. The lack of pay increases for women further adds to their dissatisfaction.

2. How Management Should Address the Concerns:

(i) Management should immediately review and equalize the pay for both male and female workers to ensure equal pay for equal work.

(ii) They should conduct training on gender equality to prevent future discrimination.

(iii) Management should implement a fair pay increase system for all workers, regardless of gender, to ensure everyone is treated equally.

3. Importance of Addressing these Issues: It is crucial for the factory to address these issues to prevent legal problems, improve worker morale, and avoid potential strikes. Fair pay and equal treatment lead to a more motivated and productive workforce, which benefits the business in the long run.

Project: Economic Data Analysis and Its Impact on a Specific Industry

In this economic data analysis project, students will explore key economic indicators like GDP (Gross Domestic Product), inflation, and unemployment rates, and analyze how these factors affect a specific industry. By examining how changes in these economic measures influence the performance of an industry, students will gain insights into how real-world economies work. For example, they might explore how a rise in inflation impacts consumer spending in the retail industry or how GDP growth can boost job creation in the tech sector. The project will involve collecting data, analyzing trends, and drawing conclusions about the relationship

between the economy and industry performance. This hands-on analysis will help students understand the practical applications of economic theory in everyday business decisions.

Objective of the study:

This project aims to analyze the relationship between key economic indicators (like GDP, inflation rates, and unemployment rates) and their impact on a specific industry or business sector over time. This study aims to explore how these factors influence business decisions and strategies, using charts, graphs, and reports to present their findings.

Step 1: Select the Economic Indicators

For this project, students will focus on three main economic indicators:

1. Gross Domestic Product (GDP):

GDP measures the total value of goods and services produced within a country. It reflects the economic health of a nation. When GDP grows, businesses often experience increased demand for their products, leading to potential growth. On the other hand, a decline in GDP may result in reduced consumer spending and lower business profits.

2. Inflation Rate:

Inflation refers to the rate at which prices for goods and services rise over time. When inflation is high, the purchasing power of consumers decreases. This can affect businesses, as higher costs may lead to price increases, potentially reducing consumer demand. Low inflation, however, can encourage spending and investment.

3. Unemployment Rate:

The unemployment rate measures the percentage of people who are actively seeking work but cannot find it. A high unemployment rate means fewer people are employed, reducing disposable income and consumer spending. For businesses, this could lead to lower sales. Conversely, lower unemployment means more people are employed, leading to higher demand for products and services.

Step 2: Select a Specific Industry or Business Sector

Students will choose a specific industry or business sector to study. For example:

(a) Retail Industry: The retail industry is highly sensitive to economic indicators. Consumer spending is influenced by GDP growth, inflation, and unemployment rates. A strong economy means more disposable income for consumers, boosting sales in retail stores.

(b) Automobile Industry: The automobile industry can be affected by economic conditions as well. A growing GDP can lead to increased demand for cars, while high inflation or unemployment may reduce consumers' ability to purchase vehicles.

c) Tourism and Hospitality Industry: The tourism sector is influenced by GDP growth (which encourages people to travel), inflation (which can increase the cost of travel and unemployment (which affects people's ability to spend on vacations).

Step 3: Collecting Data

To conduct this analysis, students will need to collect data on GDP, inflation rate and unemployment rates over a period of time (for example, the last 5-10 years). This data can be gathered from reputable sources like:

World Bank

International Monetary Fund (IMF)

Bureau of Economic Analysis (BEA)

National Sample Survey (NSS)

Students should also gather industry-specific data for the selected sector. This could include:

Sales figures

Market trends

Profit margins

Employment data within the sector

Step 4: Analyzing the Data

Students should now analyze the data by looking for patterns or trends. They can use the following approaches:

1. GDP and Industry Impact:

(i) Look at the growth of GDP over the selected years and compare it with the growth in the chosen industry.

(ii) Determine if periods of high GDP growth correspond with better industry performance (higher sales, profits, etc.).

(iii) Examine how economic recessions (low GDP) impact the industry. Are there declines in sales or profits during times of economic downturn?

2. Inflation and Business Decisions:

(i) Analyze how inflation affects prices within the industry. For example, if inflation is high, do businesses raise their prices to maintain profit margins? Or do they experience a drop in demand because prices increase?

(ii) Compare inflation rates with the performance of the sector. Are there any years where inflation is low, and the industry performs well?

3. Unemployment and Consumer Behaviour:

(i) Examine the relationship between unemployment rates and industry performance. When unemployment is high, people have less disposable income, which may lead to reduced demand for products or services.

(ii) Look for any trends in employment within the industry itself. If unemployment is low, does the industry experience higher growth due to more consumers being able to afford goods or services?

Step 5: Present Findings with Charts and Graphs

Students will use charts and graphs to present their findings. These might include:

1. GDP vs. Industry Growth Chart:

A line graph that shows GDP growth alongside the growth in the selected industry over time. This will help visualize any direct correlation between the two.

2. Inflation vs. Sales or Prices Graph:

A scatter diagram showing how inflation affects sales or prices within the industry. This will show if higher inflation leads to reduced demand or if businesses raise prices during inflationary periods.

3. Unemployment vs. Industry Performance Graph:

A bar graph or line chart comparing unemployment rates with industry performance (e.g., sales, market share, profits). This will help understand how unemployment impacts the industry.

Step 6: Write the Report

In the report, students should discuss their findings based on the data and analysis.

The report should include:

1. Introduction:

Introduce the project and explain the purpose of the analysis. Briefly describe the economic indicators being studied and why the chosen industry was selected.

2. Methodology:

Explain how the data was collected and how the analysis was performed. Mention the sources of data for the economic indicators and the industry-specific data.

3. Findings and Discussion:

Present the trends and patterns discovered in the analysis. Discuss how GDP, inflation, and unemployment affect the selected industry. For example:

(1) How did GDP growth lead to increased sales or profits in the industry?

(ii) How did inflation affect prices and demand?

(iii) How did unemployment impact consumer behaviour or the industry's workforce?

4. Conclusion:

Summarize the findings and explain how the economic indicators can influence business decisions. For instance, how can businesses in the chosen industry prepare for economic downturns by adjusting pricing or adjusting marketing strategies? How can they take advantage of periods of economic growth?

Step 7: Presentation

Finally, students will present their findings to the class, explaining their analysis through the charts and graphs. The presentation should:

1. Summarize the key trends and patterns found in the data.

2. Show how these trends affect business decisions in the chosen industry.

3. Offer recommendations for businesses in the industry on how to navigate changing economic conditions.

Conclusion:

This project helps students understand the connection between economic indicators and business decisions. By analyzing data on GDP, inflation, and unemployment, students can learn how businesses in various industries react to changes in the economy. The project encourages critical thinking and data interpretation, and it provides insights into the practical applications of economic theory in the real world.

Note: We give here only a brief outline of the project to be undertaken by students. It is students who have to prepare the project. While compiling the project, charts, graphs, etc., may be used.

Cost-Benefit Analysis for a Community Project: Renovating a Local Park

A cost-benefit analysis (CBA) is a tool used to evaluate whether a project is worth doing by comparing the expected costs to the potential benefits. For a local park renovation, this means looking at how much money and effort will be needed to renovate the park (costs), and what the community will gain from the improvements (benefits).""Costs might include things like construction, materials, and labour, as well as long-term maintenance. Benefits

could be increased community well-being, improved safety, more opportunities for recreation, and potential increases in property values nearby. By adding up the benefits and subtracting the costs, we can decide if the park renovation is a good investment for the community. If the benefits outweigh the costs, the project would likely be seen as a positive and valuable development for the area.

Objective: This project aims to conduct a cost-benefit analysis for the renovation of a local park. The analysis will evaluate the feasibility of the project by weighing its costs against the expected benefits. The project will also consider the perspectives of various stakeholders involved in the park renovation.

Step 1: Define the Project and Its Purpose

The proposed community project is to renovate a local park that has been underused and neglected over the years. The park is located in a residential neighbourhood, but it has outdated playground equipment, poorly maintained paths, and a lack of green spaces for community gatherings. The purpose of this project is to make the park a more attractive and accessible space for the community, encouraging outdoor activities, exercise, and social interaction.

Goals of the Park Renovation:

(a) Upgrade playground equipment to make it safer and more enjoyable for children.

(b) Improve walking paths to provide safe and accessible routes for people of all ages.

(c) Create green spaces where families and friends can gather for picnics and outdoor activities.

(d) Enhance environmental sustainability by planting more trees and adding flower beds.

Step 2: Identify Stakeholders

The key stakeholders in this project include:

1. Community Members (Residents): The primary beneficiaries of the park renovation, as they will directly use and enjoy the improved facilities.

2. Local Government: The government is responsible for funding and overseeing the project. They will need to assess if the park renovation aligns with broader urban planning goals.

3. Contractors and Suppliers: These are the companies that will carry out the renovation work. They will be involved in construction, providing materials, and other services.

4. Environmental Groups: These stakeholders may be involved in ensuring that the renovation project supports sustainability efforts, such as planting trees or using eco-friendly materials.

5. Businesses in the Area: Local businesses may benefit from an increase in foot traffic as more people come to visit the renovated park.

Step 3: Identify the Costs

The costs of the park renovation can be divided into direct costs (which involve actual expenses for labour and materials) and indirect costs (which include long-term maintenance and potential disruptions during construction).

1. Direct Costs:

(a) Construction Costs:

(ii) Playground equipment: 40,00,000

(ii) Walking paths and benches: ₹ 30,00,000

(iii) Landscaping and greenery: 20,00,000

(iv) New lighting and safety features: ₹15,00,000

(v) Total construction costs: ₹ 1,05,00,000

(b) Labour Costs:

Hiring construction workers and project managers: ₹20,00,000

(c) Project Management and Permits:

Administrative costs, permits, and fees: ₹10,00,000

(d) Total Direct Costs: 1,35,00,000

2. Indirect Costs:

(a) Maintenance Costs (Annual):

Regular upkeep of the playground, paths, and greenery: 5,00,000

(b) Opportunity Costs:

Temporary disruption to residents due to construction noise and limited access to parts of the park.

(c) Total Annual Maintenance Costs: ₹ 5,00,000

Step 4: Identify the Benefits

The benefits of the park renovation can be both tangible (easily measurable) and intangible (more subjective but still valuable). We will look at both types of benefits.

1. Tangible Benefits:

(a) Increased Property Value:

Properties near parks often see an increase in value. An estimated 5% increase in nearby property values could result in ₹2,00,00,000 worth of increased property values for the community.

(b) Improved Community Health: By providing better spaces for outdoor exercise (walking paths, playgrounds), the park can improve the health of residents. An estimated 10% of residents using the park for regular exercise could reduce local healthcare costs by ₹ 15,00,000 annually

(c) Increase in Local Business Revenue: Increased foot traffic to the park can lead to more customers for local businesses. An estimated 10% increase in business revenue might result in an additional 25,00,000 for nearby shops and cafes.

(d) Environmental Benefits: Planting trees and improving green spaces will have long-term environmental benefits, including cleaner air and better stormwater management. These benefits are difficult to quantify but can be estimated to save the community about 5,00,000 annually in environmental services (e.g., lower flood risk).

2. Intangible Benefits:

(a) Improved Quality of Life: Renovating the park enhances the aesthetic value of the neighbourhood, providing a pleasant place for residents to gather and relax. This can lead to a stronger sense of community and improved mental well-being for individuals who use the park regularly.

(b) Social Cohesion: The park can serve as a venue for social events, picnics, and community gatherings, fostering better relationships among neighbours.

(c) Environmental Education: The park's new green spaces can serve as an educational tool for local schools and environmental groups, teaching children about sustainability and the environment.

Step 5: Analyze the Costs vs. Benefits

Now, let's compare the costs and benefits of the park renovation.

1. Total Costs (Initial+ Annual):

(a) Initial Construction Costs: 1,35,00,000

(b) Annual Maintenance Costs: 5,00,000

2. Total Benefits (Annual):

(a) Increased Property Value: ₹ 2,00,00,000 (one-time increase)

(b) Improved Health Savings: ₹ 15,00,000 per year

(c) Increased Business Revenue: ₹25,00,000 per year

(d) Environmental Benefits: 5,00,000 per year

(e) Intangible Benefits: Social and community improvements (difficult to quantify but significant)

Step 6: Evaluate the Feasibility

The benefits of the project are expected to outweigh the costs, both in the short and long term. The benefits are as follows:

1. Short-Term Benefits:

(a) The property value increase of ₹ 2,00,00,000 is a one-time benefit that exceeds the initial cost of 1,35,00,000.

(b) Local businesses and the community will experience immediate positive impacts from improved facilities and increased foot traffic.

2. Long-Term Benefits:

(a) The annual benefits of ₹ 45,00,000 (health savings, business revenue, and environmental savings) will continue to offset the ₹5,00,000 maintenance cost each year. Over time, these ongoing benefits will justify the initial investment.

3. Intangible Benefits:

(a) While hard to measure in dollars, the improvements to community well-being, social interaction, and environmental education provide valuable, lasting impacts that enrich the lives of residents.

Step 7: Conclusion and Recommendations

Based on this cost-benefit analysis, the renovation of the local park is a feasible and beneficial project for the community. The total benefits, both tangible and intangible, exceed the costs, making the project a good investment for the future.

Recommendations:

1. The local government should proceed with the park renovation project, ensuring that funding is secured and that construction is carried out efficiently.

2. Community involvement should be encouraged, allowing residents to participate in planning and using the park for social events and activities.

3. The project should also consider long-term sustainability, such as minimizing maintenance costs and ensuring the park remains a valuable resource for future generations

Conclusion:

This cost-benefit analysis shows that the park renovation will have a positive impact on the local community, enhancing property values, health, business revenues, and social cohesion. It is a project worth investing in for both immediate and long-term benefits, and it should be prioritized by the local government.

Note: We give here the cost-benefit analysis of the community project on local park renovation. Students can take any other projects relating to community development