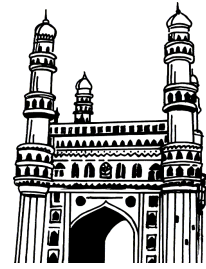


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- 1. Explain the Nature and Scope of Managerial Economics.**

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- 2. Explain the nature of business decision making problem. How is an optimal business decision made.**

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- 3. Explain the various steps in Managerial Decision Making, at what step does the knowledge of economic theory and its method help a manager to arrive at an optimum strategy?**

Ans :

Refer Unit-I, Q.No. 6

- 4. What is firm? Explain the objectives and theories of firm.**

Ans :

Refer Unit-I, Q.No. 7

- 5. Explain the differences between Accounting profit and Economic profit.**

Ans :

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- 6. Mr. X turned down a job offer of Rs. 5,00,000 per annum and started his own business. He invested Rs. 50,00,000 of his own money in the business by withdrawing the money from fixed deposit which was earning an interest of 7% per annum. He is using his own building for the business on which he was getting a rent of Rs. 15,000 per month.**

The total revenue from the business during the first year was Rs. 85,69,000. The expenses were Rs. 60,62,000. Did Mr. X take correct decision by starting the business?

Sol :

Refer Unit-I, Prob.4

- 7. Differentiate between Individual demand and market demand.**

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- 8. Discuss the factors determining demand for a commodity.**

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Ans :

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UNIT I

NATURE AND SCOPE OF MANAGERIAL ECONOMICS :

Managerial Economics – Meaning, Nature and Scope of Managerial Economics - Managerial Decision Making Process - Firm-Meaning-Objectives – Concept of Economic Profit vs. Accounting Profit Concept of Derivative - Simple rules of Derivation - Application of Derivatives to find Total Average and Marginal Cost and Revenue Functions (including problems). Demand Theory and Analysis – Individual Demand and Market Demand – Factors determining Demand (Demand Function) – Elasticity of Demand – Price Elasticity - Income Elasticity – Cross Elasticity – Elasticity of Demand and Decision Making.

1.1 MANAGERIAL ECONOMICS

1.1.1 Meaning

Q1. Define the term Managerial Economics.

(OR)

What is Managerial Economics?

Ans :

Introduction

Managerial economics is a discipline which deals with the application of economic theory to business management. It deals with the use of economic concepts and principles of business decision making.

Formerly it was known as “Business Economics” but the term has now been discarded in favour of Managerial Economics. Managerial Economics is often called as Business Economics (or) Economic for Firms.

Meaning

Managerial economics is a branch of economics that applies microeconomic analysis to decision methods of businesses (or) other management units.

Definitions

Managerial economics has been defined by different scholars as follows.

- (i) 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”.

- (ii) According to Mc Nair and Meriam,** “Managerial economics is the use of economic models of thought to analyze business situations”.

- (iii) According to Brigham and Pappas,** “Managerial economics is the application of economic theory and methodology to business administration practice”.

Managerial economics by nature is a specialized discipline of management studies that deals with the application of economic theory, tools and methodologies to business management practice.

Management economics has evolved as an integration of economic theory and decision sciences with business management.

1.1.2 Nature and Scope of Managerial Economics

Q2. Explain the Nature and Scope of Managerial Economics.

Ans :

(Imp.)

Nature

Managerial economics by nature is a specialized discipline of management studies that deals with the application of economic theory, tools and methodologies to business management practice.

Managerial economics has evolved as an integration of economic theory and decision sciences with business management.

The following points specify the nature of managerial economics.

1. Managerial economics is confined only to a part of business management but it is not directly concerned with the managerial problems involving control, implementation, conflict resolution and other management strategies.
2. Managerial economics mainly relies on the sound framework of traditional economics and decision sciences in analyzing the problems in a business. It mainly relies on the application of economic principles and methodologies for business decision-making.
3. Managerial economics is mainly microeconomic in nature. Microeconomics is that branch of economics which deals with the individual units or sections (a person, a firm or a group of persons or firms) of an economy. As managerial economics is mainly concerned with analyzing and finding optimal solutions to the problems of decision-making in a business firm, it is essentially micro economic in nature.
4. Managerial economics is pragmatic i.e., it is a practical subject. It prevents the abstract issues of economic theory and incorporates complications that are not covered by the economic theory in order to analyze the situation in which managers take decisions.
5. Managerial economics falls into normative economics. Economics can be classified into two broad categories namely positive and normative. Positive economics describes 'what is' i.e., observed economic phenomenon. The statement "Poverty in India is very high" is an example of positive economics. Normative economics describes 'what ought to be' i.e., it differentiates the ideal from the actual. An example of normative economics is the statement "People who earn high incomes ought to pay more incomes tax than people who earn low incomes".
6. Managerial economics utilizes some of the theories of macroeconomics. An organization affects and is affected by many different factors of the environment in which it works. Most factors related to this environment come under the subject matter of macroeconomics. In order to overcome these problems, an

organization takes the help of some of the theories of macro economics.

7. Managerial economics is goal-oriented and problem solving in nature. It uses the economic theory and decision sciences for solving business oriented problems.
8. It integrates theory into practice i.e., it converts the theoretical framework of economics into real business practice.

The figure below depicts the nature of managerial economics.

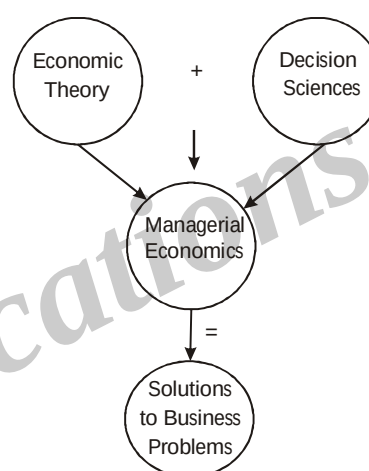


Fig.: Nature of Managerial Economics

Scope

The scope of managerial economics include all the economic concepts, theories, ideas, principles, tools and techniques that can be used to analyze the business environment and find solutions to practical business problems. The following business areas can be considered as the scope of managerial economics.

1. Objectives of a Business Firm (or) Organization

Managerial economics provides a sound framework by facilitating a business firm to frame its objectives both in the short-run and long-run.

2. Resource Allocation

Managerial economics provide the methods of effective resource allocation. It mainly aims at achieving high output through low and proper allocation of resources.

3. Demand Analysis and Demand Forecasting

It suggests the methodologies for analyzing the demand of a product. The demand forecasting techniques it provides are proven to be quite efficient for meeting the competition.

4. Competitive Analysis

The techniques provided by managerial economics facilitates a firm to withstand in a competitive situation.

5. Strategic Planning

Managerial economics guides a business manager in making strategic decisions.

6. Production Management

Managerial economics plays a vital role in production management. It's effective tools helps to plan the business schedule, regulate the production process and effectively place the output in the market.

7. Cost Analysis

Managerial economics provide various cost concepts and cost curves that facilitate in determining cost-output relationship both in short- run and long-run.

8. Pricing Strategies

Managerial economics provides certain pricing strategies that are used in analyzing the price of a product and in determining or setting the price of a product.

9. Market Structure Analysis

The techniques and concepts of managerial economics analyze the market structure and guide in taking necessary decisions that are required for a firm to exist in the market.

10. Investment and Capital Budgeting Decisions

The concept of opportunity cost provided by managerial economics facilitates in making appropriate investment decisions and choose the best alternative that fits the organizational requirements.

11. Marketing Strategies

Managerial economics provide marketing strategies like,

- Product policy
- Sales promotion
- Segmentation, targeting and positioning of markets.

12. Economies of Scale

Managerial economies in the long-run helps a firm to enjoy economies and diseconomies of scale.

13. Profit Management

Managerial economics mainly concentrates on the primary goal of a firm i.e., profit maximization. It deals with the activities like profit estimation and profit planning.

14. Input and Output Analysis

The concept of production function managerial economics depicts the input and output relationship.

Q3. Explain the characteristics and significance of managerial economics.

Ans :

Characteristics

These characteristic of Managerial Economics are :

1. Managerial economics is micro-economic in character as it concentrates only on the study of the firm and not on the working of the economy.
2. Managerial economics takes the help of macro-economics to understand and adjust to the environment in which the firm operates.
3. Managerial economics is normative rather than positive in character. It is prescriptive rather than descriptive. That is, it is concerned with the type of decisions that the firm should take in order to prosper, which involves value judgments and not a mere description of behaviour of the firm.

4. It is both conceptual and metrical It takes the help of conceptual framework to understand and analyze the decision problems and takes the help of quantitative techniques to measure the impact of different factors and policies.
5. The contents of managerial economics are based mainly on the 'theory of firm'. It is only for the analysis of profits that help is taken of the 'theory of distribution'.
6. Knowledge of managerial economics helps in making wise choices. Managers continue to face the problem of scarcities and consequently, must continue to make choices. Managerial economics, being the study of the allocation of the resources available to a firm among the activities of that unit, is useful as it is goal-oriented and aims at maximum achievement of objectives.

Significance

Managerial economics mainly helps in decision-making. The following points specify the significance of managerial economics.

1. Managerial economics presents those aspects of traditional economics which are relevant for business decision - making. For this purpose it utilizes the economic theory, concepts, principles and techniques.
2. It evaluates the effect of alternative courses of action and chooses the best or optimal course of action among the several alternatives.
3. Managerial economics enables the manager to become more competent model builder by providing a number of tools and techniques. By using these techniques the manager can capture the essential relationships that are nearer to the real situation and eliminate the less important details.
4. Managerial economics helps in arriving at a variety of business decisions in a complicated environment. It helps in making decisions regarding.
 - Type and nature of products or services to be produced.

- Selecting the optimal input combinations and the production techniques to be followed in producing the output.
- Amount of output to be produced and deciding the price for the product or service.
- Choosing the best sizes and locations of plants.
- Allocation of capital available.
- Product mix decisions.
- Investment decisions.
- Product promotion strategies.

Q4. Discuss the limitations of managerial economics.

Ans :

Though managerial economics provides solutions to various business problems, it is criticized on the following grounds.

1. Determination of demand and cost of a particular product is not always easy because of prevailing uncertain marketing conditions. The uncertainties in the environment impose a lot of difficulty for obtaining demand and cost functions accurately.
2. Marginal analysis of a product is not always a base because it may not be relevant to certain industries.
3. The forecast made by managerial economist should be accurate. But it is not possible because future is uncertain.
4. Classifying the markets practically is not possible. Even taking decisions related to the market on the basis of analysis done is impossible as the market conditions change from time to time.
5. The manager must take decisions in accordance with the objectives of the firm. But when dealing with ever fluctuating market conditions, he might divert from the path of objectives of the firm.

1.1.3 Managerial Decision Making Process

Q5. Explain the nature of business decision making problem. How is an optimal business decision made.

(OR)

What is the role of managerial economics in decision making ?

(OR)

Discuss the scope and significance of managerial economics in decision making.

(OR)

Explain the role of managerial economics in decision making.

Ans : **(Imp.)**

Decision-making problem requires a choice among alternative courses of action so as to achieve the objective. These alternative courses of action among which choice has to be made are often called business strategies. The nature of decision-making problem faced by business firm is therefore of the following type.

To identify the alternative courses of action of achieving given objective(s), and then to select the course of action that achieves the objective in the economically most efficient way.

- Modern economics is divided into two broad branches: micro economics.
- macro economics. Micro economics is concerned with theory of individual choice.
- Choice by a consumer and choice by a business firm.
- On the other hand, macro economics focuses on analyzing the economy as a whole and its aggregates such as GNP, the general price level, the level of employment, etc.
- Managers (or) rational businessmen get assistance from both the micro economics and macro economics while making business decisions, but concepts and techniques of micro economic theory are of greater help for

them. This is because micro economics tells us how to make a rational choice in allocating scarce resources of the firm while making decisions regarding price, output, technology, advertising expenditure, and capital investment expenditure which are the direct concern of business management.

- Through their individual actions and choices managers can do little to affect the aggregate economy, with which macro economics is concerned. But macro economics tells him how his business environment will change as a result of movements in the aggregate economy such as situations of recession or inflation, changes in economy's balance of payments and the Government policy to tackle them which affect the outcome of business decisions. Thus, the managers during their decision-making process must take into account the current macro economic outlook and likely changes in it in the future.

Q6. Explain the various steps in Managerial Decision Making, at what step does the knowledge of economic theory and its method help a manager to arrive at an optimum strategy?

(OR)

Explain the process of decision making.

Ans : **(Imp.)**

Decision making is crucial for running a business enterprise which faces a large number of problems requiring decisions. Which product to be produced, what price to be charged, what quantity of the product to be produced, what and how much capital advertisement expenditure be made, how much investment expenditure be incurred to promote the sales are some of the problems which require decisions to be made by managers. Decision making process in each of these problems contains several phases or steps which are explained below:

1. Establishing Objective

The first step in the decision making process is to establish the objective of the business enterprise. The important objective of a private business enterprise is to maximize

profits. However, a business firm may have some other objectives such as maximization of sales or growth of the firm.

But the objective of a public enterprise is normally not of maximization of profits but to follow benefit-cost criterion. According to this criterion, a public enterprise should evaluate all social costs and benefits when making a decision whether to build an airport, a power plant, a steel plant, etc.

2. Defining Problem

The second step in decision making process is one of defining or identifying the problem. Defining the nature of the problem is important because decision making is after all meant for solution of the problem. For instance, a cotton textile firm may find that its profits are declining. It needs to be investigated what are the causes of the problem of decreasing profits. Whether it is the wrong pricing policy, bad labour-management relations or the use of outdated technology which is causing the problem declining profits. Once the source or reason for falling profits has been found, the problem has been identified and defined.

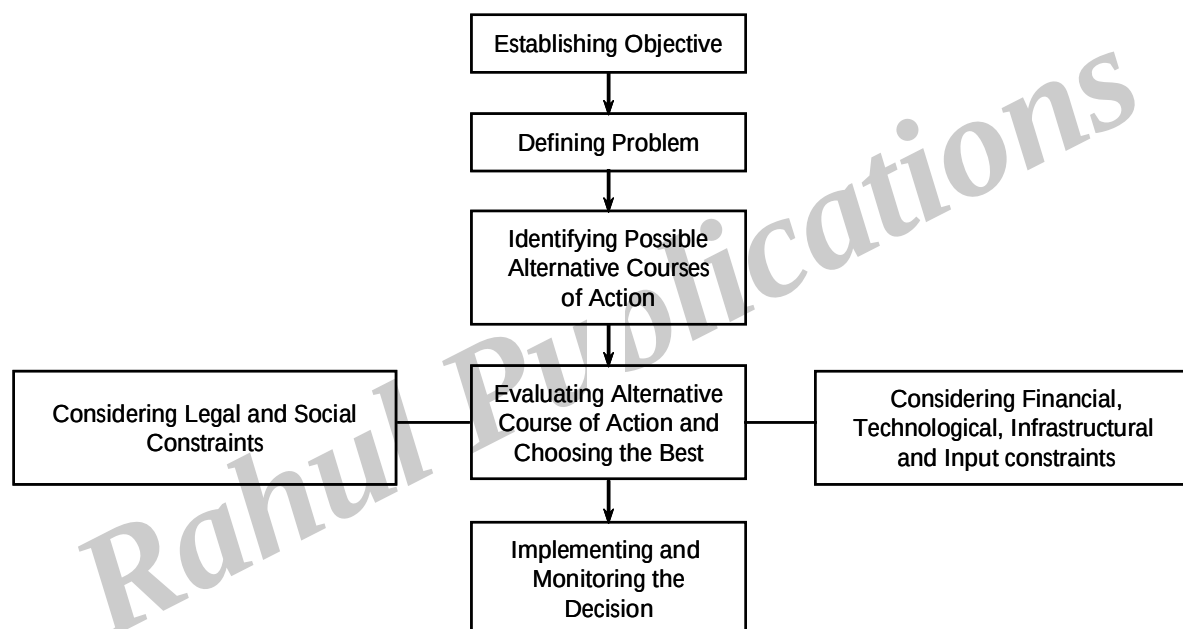


Fig. : Process of Decision Making

3. Identifying Possible Alternative Courses of Action

Once the problem has been identified, the next step is to find out alternative solutions to the problem. This will require considering the variables that have an impact on the problem. In this way, relationship among the variables and with the problems has to be established. In regard to this, various hypotheses can be developed which will become alternative courses for the solution of the problem. For example, in case of the problem mentioned above, if it is identified that the problem of declining profits is due to the use of technologically inefficient and outdated machinery in production, the two possible solutions of the problem are :

- (a) Updating and replacing only the old machinery.
- (b) Building entirely a new plant equipped with latest machinery.

The choice between these alternative courses of action depends on which will bring about large increase in profits.

4. Evaluating Alternative Courses of Action and Choosing the Best

The next step in business decision making is to evaluate the alternative courses of action. This requires the collection and analysis of the relevant data. Some data will be available within the various departments of the firm itself, the other may be obtained from the industry and government. The data and information so obtained can be used to evaluate the outcome or results expected from each possible course of action. Methods such as regression analysis, differential calculus, linear programming, cost-benefit analysis are used to arrive at the optimal course. The optimum solution will be one that helps to achieve the established objective of the firm. The course of action which is optimum will be actually chosen. It may be further noted that for the choice of an optimal solution to the problem, a manager works under certain constraints. The constraints may be legal such as laws regarding pollution and disposal of harmful wastes; they may be financial (i.e., limited financial resources); they may relate to the availability of physical infrastructure and raw materials, and they may be technological in nature which set limits to the possible output to be produced per unit of time. The crucial role of a business manager is to determine optimal course of action and he has to make a decision when working under all these constraints.

5. Implementing and Monitoring the Decision

After the alternative courses of action have been evaluated and optimal course of action selected, the final step is to implement the decision. The implementation of the decision requires constant monitoring so that expected results from the optimal course of action are obtained. Thus, if it is found that expected results are not forthcoming due to the wrong implementation of the decision, then corrective measures should be taken.

However, it should be noted that once a course of action is implemented to achieve

the established objective, changes in it may become necessary from time to time in response in changes in the conditions or firm's operating environment on the basis of which decisions were taken.

1.2 FIRM

1.2.1 Meaning and Objectives

Q7. What is firm? Explain the objectives and theories of firm.

Ans : (Imp.)

Meaning

A firm is an organization which transforms the hired input into outputs for sale. Two types of input are used by the firms, human resources (such as labour resource and entrepreneurial resource) and capital resources (such as land, man made capital, forests rivers etc.). The most important task of the firm as to purchase the resources or inputs and transform them into goods or services for sale.

Objectives

- Initially, profit maximization was considered as the single most objective of firm.
- But now the scholars has also considered sales maximization and growth maximization as the objectives of the firm.
- All the organizations has certain objectives which helps in providing a structure for all the functions, strategies and managerial decisions of that firm.

Theories

The following are the various theories of the firm,

1. Profit Maximization Theory

Profit maximization is one of the most common and widely accepted objective of a firm. According to the profit maximization theory, the main aim of the firm is to produce large amount of profits. Profit is considered as the internal source of funds and the market value of the firm also rely mainly on the

profits earned by the firm. In order to survive in the market, it is very essential for the firms to earn profits.

Profits are obtained by deducting total revenue from the total cost i.e.,

$$\text{Profit} = \text{Total revenue} - \text{Total cost}$$

2. Baumol's Theory of Sales Revenue Maximization

The validity of profit maximisation as an objective of firm was questioned by Baumol. According to Baumol, maximisation of sales revenue is the main objective of the firms in the competitive markets. He found that sales volumes helps in finding out the market leadership in competition. According to him, in large organization, the salary and other benefits of the managers are connected with the sales volumes instead of profits. So, managers try to maximize the total revenue of the firms. The volumes of sales represents the position of the firm in the market. The increase in the sales figures enhances the competitive new of the firm. The managers of firm performs the operations of the firm and their performance is measured on the basis of the attainment of sales target so the management will try to maximize sales and maintain minimum profit. Thus, the main aim of the firm to maximize sales revenue and maintain minimum profits for satisfying shareholders.

3. Marris Hypothesis Maximisation of Growth Rate

According to Marris, owners/shareholders strives for attaining profits and market share and managers strives for better salary, job security and growth. These two objectives can be attained by maximizing the balanced growth of the firm. The balanced growth of the firm rely mainly on the growth rate of demand for the firm's products and growth rate of capital supplied to the firm. If the demand for the firm's product and the capital supplied to the firm grows at the same rate then the growth rate of the firm will be considered as balanced.

Marris found that the firms faces two difficulties while attaining the objective of maximisation of balanced growth which are managerial difficulties and financial difficulties.

For maximizing the growth of the firm the managers should have skills, expertise, efficiency and sincerity in them. The prudent financial policy of the firm depends on atleast three financial ratios which restricts the growth of the firm.

4. Williamson Model of Managerial Utility Functions

Williamson's model combined profit maximisation and growth maximisation objectives. According to the model of managerial utility functions, managers makes use of their discretionary power for maximizing their own utility function and maintains minimum profits for satisfying shareholders.

The Williamson's model is written as,

$$X_N = f(R, N, Y_A)$$

Where,

X_N = Manager's utility function

R = Salary

N = Managerial emoluments

Y_A = Power of discretionary investments.

The utility function of the managers rely on salary of the managers, job security, power, status, professional satisfaction and power to affect the objectives of the firm.

5. Behavioural Theories

According to the behavioural theories the firm tries to attain a satisfactory behaviour instead of maximisation. These are two important behavioural models, Simon's satisfying model and model developed by Cyest and March.

The Simon's satisfying model states that firms carry out their operations under 'bounded rationality' and can only attain a satisfactory level of profit, sales and growth,

Simon carried out a research and found that modern business does not have adequate information and is uncertain about future due to which it is very difficult to attain profit, sales and growth objectives.

The model developed by Cyert and March states that firms should be oriented towards multigoal and multi decisions making. Instead of dealing with uncertainty and inadequate information, the firms should fulfill the conflicting goals of various stakeholders such as shareholders, employees, customers, financiers, government and other social interest groups.

Thus, the above mentioned were the various theories of firm.

Q8. Explain briefly about theory of firm (or) profit maximization.

Ans :

The 'theory of firm' has been developed on the basis of the assumption that rational firms pursue the objective of profit maximisation, subject to the technical and market constraints.

The basic propositions of the theory of firm may be summed up as :

- (a) Firm is a unit which transforms valued inputs into outputs of a higher value, given the state of technology.
- (b) The firm strives towards the achievement of its goal—usually profit maximisation.
- (c) The market conditions (like competition, monopoly, etc.) for a firm to operate are given.
- (d) While choosing between alternatives, the firm prefers the alternative which helps it to consistently achieve profit maximisation.
- (e) The primary concern of the theory of firm is to analyse changes in the prices and quantities of inputs and outputs.

Taking these as central points, the theory of firm has been carried to varying degrees of elaboration and refinement. Before taking it up in detail, let us note the basic assumptions on which this theory rests.

Assumptions

1. The firm has a single goal, viz., to maximize profit.
2. The firm acts rationally to pursue its goal. Rationality implies perfect knowledge of all relevant variables at the time of decision-making; and
3. The firm is a single-ownership one, i.e., run by its owner, called the entrepreneur.
 - The term 'profit maximisation' is usually taken to mean the generation of largest absolute amount of profits over the time period being analyzed. This then leads us to defining the term 'time period'.
 - Economists have suggested two broad time periods : the short run and the long run consequently, there is short-run profit maximisation and long-run profit maximisation.
 - The short run is defined as a period where adjustments to changed conditions are only partial, e.g., if demand for the product for a firm increases, in the short run it can meet the increased demand through changes in manhours and intensive use of existing machinery, but it cannot increase its production capacity.
 - On the other hand, long run is a period where adjustment to changed circumstances is complete.
 - Firm can meet the increased demand in the long run by making changes in its production capacity or by setting up an additional plant, besides changes in man-hours and intensive use of its existing machinery. Thus, in the short run there are certain constraints (physical or financial or both) on expansion. As time passes, these constraints can gradually be overcome and, when all the constraints are overcome, the long run is reached.

Q9. Explain about Managerial theories of Firm.**Ans :**

The main argument of managerial theories is that in modern large firms, ownership and control are divorced. Managers, therefore, have a primary role in the effective control of the firm. The firm, then, seems to behave so as to maximize managerial objectives rather than shareholders' profits. Like the traditional theory of firm the managerial theories are also optimizing theories, though what is maximized differs : in the theory of firm it is the profit maximisation, while in the managerial theories it is the maximisation of managerial utility. Different managerial theories of the firm view managerial utility as a function of different combinations of variables like, salary, status, power, growth and job security. Managerial theories may be broadly classified into three categories:

1. Sales Revenue Maximisation Model Baumol,
2. Managerial Utility Models, and
3. Growth Maximisation Models

Q10. Explain sales Revenue maximization model.**Ans :**

According to Baumol, the oligopolistic firms aim at maximizing their sales revenue. The reasons for this are the following :

- Financial institutions judge the health of a firm largely in terms of the rate of growth of its sales revenue.
- There is evidence that slack earnings and salaries of top management are correlated more closely with the firm's sales than with its profits.
- While increasing sales revenue over time provides prestige to the top management, profits go to shareholders.

➤ Growing sales help in keeping a healthy personnel policy, thus keeping employees happy by giving them higher salaries and better terms. On the other hand, declining sales result in reduction in salaries, slack earnings and eventually lead to layoff of the employees, thus creating dissatisfaction and uncertainty among them.

➤ It has been observed that managers prefer a 'steady performance with satisfactory profits' than spectacular profit-maximisation projects. This is so because if the managers declare their aim as spectacular profit maximisation but, for obvious reasons, cannot give the spectacular profits year after year, they shall be penalised for the non-achievement of the goal. On the other hand, setting the goal as steady performance with satisfactory profits is safe for the growth managers.

The desire for a steady performance with 'satisfactory' profits along with the separation of ownership and management, tend to make the managers reluctant to adopt promising projects which are risky. The top managers become, to a certain extent, risk-aversers. New projects suggested by the research units of the firm are adopted but are spread over time so as to avoid wide swings in economic performance of the firm.

➤ Large and growing sales by maintaining or increasing the market share of the firm increases competitive power of the firm.

Assumptions

- (a) Goal of the firm is sales maximisation subject to minimum profit constraint.
- (b) Advertisement is a major instrument of the firm as non-price competition is the typical form of competition in oligopolistic markets.
- (c) Production costs are independent of advertising.
- (d) Advertising will always result in creating favourable conditions for the product. In other words, it will always shift the demand

curve to the right, which implies that the firm will sell larger quantity and earn larger revenue {i.e., $\frac{\partial R}{\partial a} > 0$, where R is sales revenue and a is the advertising expenditure}.

(e) Price of the product is assumed as constant.

Q11. Explain briefly about managerial utility models.

Ans :

There are at least two main versions of the cases where managers in the modern large corporations are asked to influence the goals of the firms and not go along wholly pursuing the goals of the owners. These theories are discussed below.

(i) Berle-Means-Galbraith Model of 'Corporate Power Structure'

The Modern Corporation and Private Property in 1932, Berle and Means suggested for the first time the important implications of the separation of ownership and management in a modern corporation. According to them, while owners are interested in maximizing profits, the managers have their own desires, needs and motivations. Further, due to lack of corporate democracy the managers have a greater power on corporate policy. Moreover, sufficient investible funds can be generated from retained earnings, consequently the management need not venture into capital markets where the firm would be subject to close scrutiny. Hence, Berle and Means concluded that corporate managers are free to pursue their own goals.

In recent times, Galbraith has provided several variations of the Berle-Means approach. According to Galbraith, the traditional viewpoint of management of a corporation (where the owner is also the manager of the firm) may be depicted in terms of the vertical corporate power structure. Fig. where shareholders (or owners) hold the ultimate power.

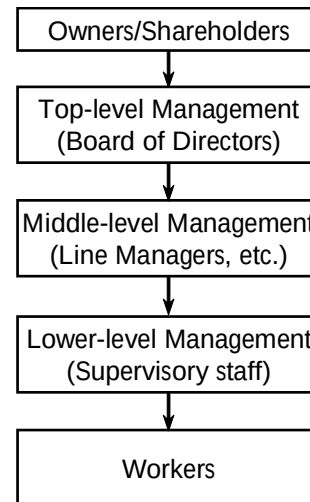


Fig.: Corporate Power Structure: Traditional Viewpoint

In large modern industrial corporations, the ownership and managerial control generally happen to be in the hands of two separate sets of people—the shareholders and managerial team—rather than in the hands of only one set, as suggested by the traditional theory. The traditional viewpoint has been depicted in Fig. which shows shareholders holding the ultimate power. They pass on their decisions downwards in the hierarchical structure of directors, middle-level management, supervisory staff and workers.

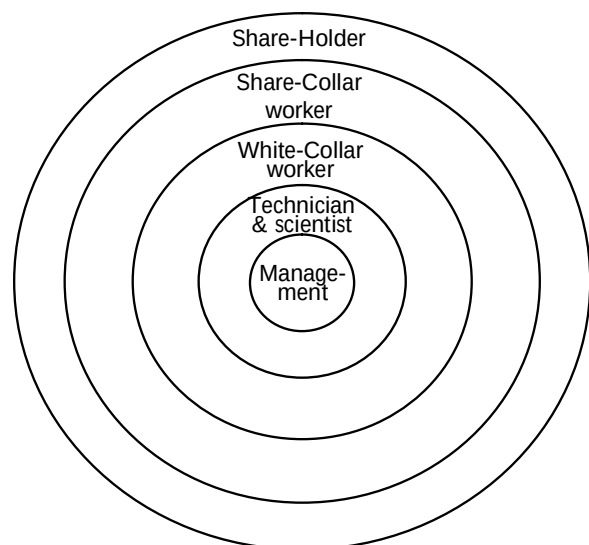


Fig.: Corporate Power Structure: Modern Viewpoint

Propositions

- (a) Profit rates are higher in owner-controlled firms than in manager-controlled firms. This is so because management ignores profit-maximizing interests of the owners (or, share-holders); and,
- (b) Professional corporate managers have no personal motivation to maximize profits.

(ii) O. Williamson's Model of Managerial Discretion'

A more useful model of managerial utility is given by O. Williamson, known as the 'Model of Managerial Discretion'. In the Williamson's model, managers are free to pursue their own self-interest once they have achieved a level of profit that will pay satisfactory dividends to shareholders and still ensure growth. The managers' self-interest depends upon many other things besides salary. Further, so far as the goodwill of the firm serves their own ends and ambitions, the managers would be concerned about it, else they would try to bypass it.

Assumptions of the Model. Williamson adopts the same set of assumptions as does Baumol in his Sales Revenue Maximisation model, viz.,

- (a) Market is non-perfectly competitive.
- (b) Ownership of the firm and management of the firm are divorced from each other.
- (c) A minimum profit constraint is imposed on the managers by the capital market (or, shareholders) which cannot be ignored by the management.

Q12. Explain about growth maximization models.

Ans :

Meaning

Growth of the firm is obviously the cornerstone of corporate strategy. Rate of growth and potential of growth are generally used as yardsticks to measure corporate success. Growth of a firm must be financed either from retained earnings or from market borrowings or both. Internal financing of growth is often preferred to growth through borrowed funds, even when internally generated funds involve cost in terms of their opportunity cost. The main reason for this is that debt service payments in future may inhibit growth capacity.

Internal funds can, however, grow only through profit-maximisation. The decision to maximize growth, therefore, is necessarily a decision to maximize profit.

(i) Baumol's Model of Growth Maximization :

Baumol assumes that growth is needed primarily to increase profitability. According to him the firm aims to find the optimal short run growth rate that will contribute the most to long-run profitability. Baumol's model states that total cost rises faster than total revenue at higher rates of growth because :

- capital markets are imperfectly competitive,
- construction and expansion costs become exceptionally high,
- fixed investments start yielding decreasing returns, and
- business risks increase.

Higher ratio of costs to revenues at higher rates of growth implies that profits start diminishing after reaching a peak.

(ii) Marris' Model of Managerial Enterprise:

Marris tried to improve upon Baumol's model. He offered a variation of Baumol's model that stressed the maximisation of growth subject to the security of management's position. Marris' hypothesis is that executive actions are limited by the need for management to protect itself from dismissal or takeover raids in the event of failure.

Like Williamson, Marris' approach is also based on the fact that ownership and control of the firm is in the hands of two different sets of people. He, like Williamson, also suggests that managers have a utility function in which salary, status, power, prestige and security are important variables. Owners of the firm {i.e., shareholders} are, however, more concerned about profits, market share, output, etc. In other words, goals of the managers and shareholders differ from each other. The utility function of managers (U_M) and that of the owners (U_O) may, therefore, be defined as:

$U_M = f(\text{salaries, power, status, job security})$

and $U_O = f(\text{profits, market share, output, capital, public esteem})$.

(iii) Penrose's Theory of the Firm :

The preoccupation of Penrose's analysis is to examine the managerial constraint on growth of the firm. Though her theory is not directly concerned with the objectives of the firm, yet it finds its place here because of its focus on the role of managers in the growth process of the firm.

Penrose makes a bold assumption that the firm is both a profit and a growth maximizer and that there is no conflict in these two objectives when pursued simultaneously. She emphasises that growth depends upon managerial services within the firm—the incentive for growth comes from the underutilised skills and capacities of the managerial staff.

Penrose divides managerial roles into two categories :

- (i) to conduct operations and activities according to plan; and
- (ii) to plan and carry out activities related to expansion.

She argues that a firm with a given managerial staff may grow for two reasons :

- A fixed amount of managerial services devoted to expansion will create a flow of expansionary projects; and
- With time, the running of each new project will become less demanding in terms of managerial services, thus creating underutilised 'managerial capacity' for undertaking additional projects.

1.2.2 Concept of Economic Profit vs. Accounting Profit**Q13. Define profit. What are the characteristics of profit.**

Ans :

The term "Profit" is usually understood to mean the difference between the total sale-proceeds obtained by a businessman and his total expenses of production. It is the surplus that remains in the hands of the businessman after paying rent, wages, interest on borrowed capital etc.

Definitions

Important definitions of Profit as given by different authors are as follows:

- (i) **According to Prof. Marshall**, "Profit is the earning of management".
- (ii) **According to Walker**, "Profit is the rent of ability".
- (iii) **According to Croome**, "Profit is the reward for uninsured risks".
- (iv) **According to Ely**, "Profit is a surplus over and above the expenses of production".
- (v) **As Taussig has said**, "Profit is a mixed and vexed income."
- (vi) **According to Prof. J. K. Mehta**, "The element of uncertainty introduces a fourth category of sacrifice in the productive activities

of man in a dynamic world. This category is risk-taking or uncertainty bearing. It is remunerated by Profit.”

Since economists are of this opinion that

$$\text{Profit} = \text{Gross Profit} - (\text{Rent} + \text{Wages} + \text{Interest})$$

Characteristics

1. Profit is a Residual Reward

It means profit is received by the entrepreneur as a residual surplus, which is left over after meeting all the business expenses from the sales receipts.

2. It is not Contractual or Pre-Determined Payment

Remember Profit is not like rent, wages, interest and Profit a pre-determined contractual payment. Therefore, it can be said that it is not an explicit cost.

3. It is the End Result of Business

In profit other factors rewards such as rent, wages and interest are received by their agents during the process of production. Profit is realized by the entrepreneur only after the completion of the business, i.e., after completing the sales and meeting all the expenses.

4. Profit is a Dynamic Concept

Profit depends on many factors such as entrepreneur's organizational ability, changes in market demand and supply conditions, element of monopoly power, innovation such as production of new items, discovery of new-markets, new modes of advertising and sales propaganda etc. and many other dynamics changes in the economy.

5. It is not Determined through Formal Factors of Market

In all other factor prices are determined in a formal market.

Example 1

Let's say that a firm's total revenue is Rs.80,000 and its explicit costs and implicit costs are Rs.50,000 and Rs .25,000, respectively. What are the firm's economic and accounting profits ?

Sol :

Economic Profits are: Rs.80,000 – Rs.75,000 = Rs 5,000.

Accounting Profits are: Rs 80,000 - Rs 50,000 = Rs 30,000

Example 2

Let's say that a firm's total revenue is Rs 80,000 and its explicit costs and implicit costs are Rs 70,000 and Rs 25,000, respectively. What are the firm's economic and accounting profits ?

Sol :

Economic Profits are: Rs 80,000 - Rs 95,000 = Rs.-15,000 (a loss of Rs 15,000).

Accounting Profits are: Rs 80,000 - Rs 70,000 = Rs 10,000

Q14. Explain the differences between Accounting profit and Economic profit.

Ans :

(Imp.)

S.No.	Accounting Profit	Economic Profit
1.	It is the gap between total revenue and accounting cost or explicit costs.	It is the gap between total revenue and economic costs.
2.	Accounting profit does not accounts implicit or opportunity cost in its cost side.	Economic profit includes both explicit as well as implicit cost in its cost side.
3.	Accounting profit can be taken as a part of economic profit.	Economic profit can not be taken as a part of accounting profit.
4.	It is micro concept and based on accounting period.	It is macro concept and based on comprehensive market view.
5.	It is considered for income tax and measure of financial performance of a company or firm.	It is considered to determine the financial situation and basis for knowing whether or not stay in the market.
6.	It only deals with profitability of the firm.	It is more than that and also consider the measure of resource allocation.
7.	It is more practically determined and short-run phenomenon	It is calculated based on assumption and long-run phenomenon.

1.3 CONCEPT OF DERIVATIVE

1.3.1 Simple rules of Derivation

Q15. Define derivative. Explain simple rules of derivation with an examples.

Ans :

In a continuous and smooth non-linear curve when a change in the independent variable, that is, ΔX gets smaller and approaches zero, $\frac{\Delta Y}{\Delta X}$ becomes better approximation of the slope the function, $Y = f(X)$, at a particular point. Thus, if ΔX is infinitesimally small, $\frac{\Delta Y}{\Delta X}$ measures the slope of the non-linear function at a particular point and is called the derivative $\frac{dY}{dX}$ of the function with respect to X. The derivative $\frac{dY}{dX}$ or more precisely the first derivative of a function is defined as limit of the ratio $\frac{\Delta Y}{\Delta X}$ as ΔX approaches zero. Thus

$$\frac{dY}{dX} = \lim_{\Delta X \rightarrow 0} \frac{\Delta Y}{\Delta X}$$

It is thus evident that derivative of a function shows the change in value of the dependent variable when change in the independent variable (ΔX) becomes infinitely small. Note that derivative of a function

$[Y = f(X)]$ is also written as $\frac{d(fX)}{dX}$ or $f'(X)$.

As explained above, the derivative of a function at a point measures the slope of the tangent at that point. Consider Figure when $\Delta X = X_3 - X_1$, the slope of the corresponding straight line AB is equal to $\frac{Y_3 - Y_1}{X_3 - X_1}$. When ΔX becomes smaller and is equal to $X_2 - X_1$, slope of the corresponding line AC is equal to $\frac{Y_2 - Y_1}{X_2 - X_1}$. It will be seen from Figure that slope of line AC is more near to the slope of the tangent tt drawn at point A to the function curve. Similarly, if ΔY is reduced further, slope of the straight line between the two corresponding points will go on becoming closer and closer to the slope of the tangent tt drawn at point A to the curve. At the limit of $\frac{\Delta Y}{\Delta X}$ when ΔX approaches zero, slope of the tangent such as tt at a point on a function becomes the derivative $\frac{dY}{dX}$ of the function with respect to X .

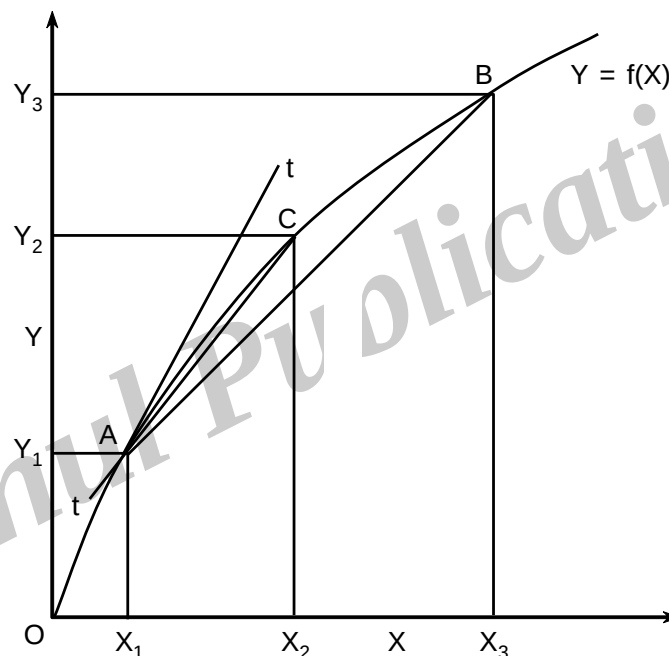


Fig. : Finding Derivative of a Function ($Y = f(x)$) at a point

Thus, derivative $\frac{dY}{dX}$ is slope of a function whether it is linear or non-linear and represents a change in the dependent variable due to a small change in the independent variable. The concept of a derivative is extensively used in economics and economic decision making, especially in solving the problems of optimization such as those of profit maximisation, cost minimization, output and revenue maximisation.

There are various types of functions and for them there are different rules for finding the derivatives. We will explain below the basic rules of finding derivatives of the various types of functions.

Rules

Process of finding the derivative of a function is called differentiation. As stated above, derivative of a function represents the change in the dependent variable due to an infinitesimally small change in the

independent variable and is written as $\frac{dY}{dX}$ for a function $Y = f(X)$. A series of rules have been derived for differentiating various types of functions. We describe below these rules of differentiation.

(i) Derivative of a Constant Function

A constant function is expressed as

$$Y = f(X) = a$$

Where 'a' is constant. The constant 'a' implies that Y does not vary as X varies, that is, Y is independent of X. Therefore, the derivative of a constant function is equal to zero. Thus, in this constant function.

$$\frac{dY}{dX} = 0$$

For example, let the constant function be

$$Y = 2.5$$

This is graphed in Figure. It will be seen that a constant function is a horizontal straight line (having a zero slope) which shows that irrespective of the value of the variable X, the value of

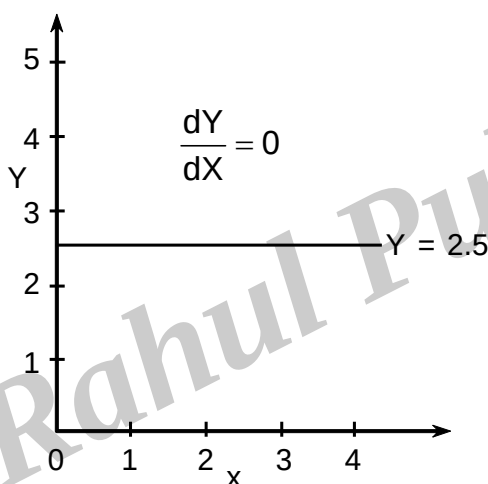


Fig.: Graph of a Constant Function

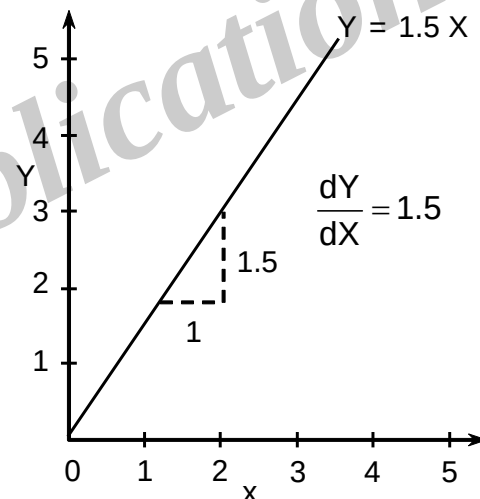


Fig.: Graph of a Linear Function

Y does not change at all. Therefore, in this case derivative $\frac{dY}{dX} = 0$

(ii) Derivative of a Power Function

A power function takes the following form :

$$Y = aX^b$$

Where a and b are constants. Here a is the coefficient of the X term and the variable X is raised to the power b. The derivative of this power function is equal to the power b multiplied by the coefficient a times the variable X raised to the power b – 1. Thus rule for the derivative of power function ($Y = a X^b$) is

$$\frac{dY}{dX} = b.a.X^{b-1}$$

Let us take some examples of determining the derivative of a power function.

First, take the following power function :

$$Y = 1.5 X$$

In this function 1.5 is the coefficient of variable X , that is, a and the power b of X is 1 (implicit). Using the above rule for the derivative of a power function we have

$$\frac{dY}{dX} = 1 \times 1.5X^{1-1} = 1 \times 1.5 X^0 = 1.5$$

This is graphically shown in Figure. It will be seen from this figure that slope of the linear function ($Y = 1.5X$) is constant and is equal to 1.5 over any range of the values of the variables X .

(iii) Quadratic Power Function

Let us take the following example of a power function which is of quadratic type.

$$Y = X^2$$

Its derivative, $\frac{dy}{dx} = 2X^{2-1} = 2X^1 = 2X$

To illustrate it we have calculated the value of Y , associated with different values of X such as 1, 2, 2.5 and -1 , -2 , -2.5 and have been shown in Table.

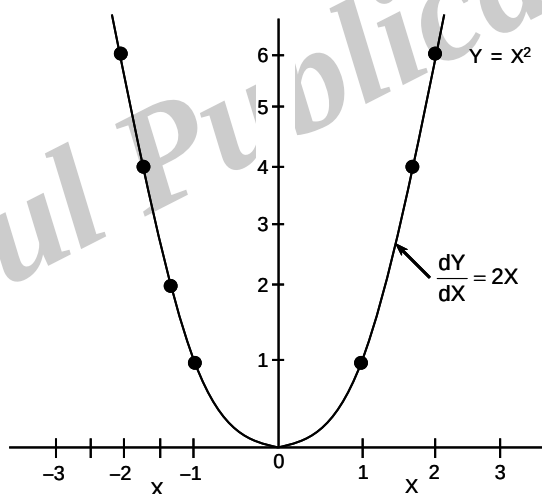


Fig . Graph of a Quadratic function

Value of X	-2.5	-2	-1	+1	+2	+2.5
Value of Y	-6.25	-4	-1	+1	+4	+6.25

Table: Quadratic Power Function $Y = X^2$

We have plotted the values of X and corresponding values of Y to get a U-shaped parabolic curve in Figure. It will be seen that derivative $\frac{dY}{dX}$ or, in other words, slope of this quadratic function is changing at different values of X . Some other examples of power function and their derivatives are :

For power function, $Y = 3X^2$

$$\frac{dy}{dx} = 2 \times 3. X^{2-1} = 6X$$

For power function; $Y = X^5$

$$\frac{dY}{dX} = 5 \times 1. X^{5-1} = 5X^4$$

For power function; $Y = X$

$$\frac{dY}{dX} = 1 \times 1 X^{1-1} = 1 \times 1. X^0 = 1$$

It should be noted that any variable raised to the zero power (as in our example X^0) is equal to 1 For power function, $Y = 3X^{-2}$

$$\frac{dY}{dX} = -2 \times 3. X^{-2-1} = -6X^{-3}$$

(iv) Derivative of a Sum (or) Difference of Two Functions

The derivative of a sum of the two functions is equal to the sum of the derivatives obtained separately of the two functions.

Suppose, $Y = f(X) + g(X)$

Where $f(X)$ and $g(X)$ are the two unspecified functions and Y is the sum of the two functions. The derivative of their sum is

$$\frac{dY}{dX} = \frac{df(X)}{dX} + \frac{dg(X)}{dX}$$

Likewise, the derivative of the difference of the two or more different functions is the difference of their separate derivatives. Thus, if

$$Y = f(X) - g(X)$$

$$\text{then } \frac{dY}{dX} = \frac{df(X)}{dX} - \frac{dg(X)}{dX}$$

To illustrate, we take some examples.

$$\text{If, } Y = 4X^2 + 5X$$

$$\text{then } \frac{dY}{dX} = 2 \times 4X^{2-1} + 1 \times 5X^{1-1} = 8X + 5$$

$$\text{If } Y = 5X^2 - 2X^5$$

$$\frac{dY}{dX} = 10X - 10X^4$$

Now, consider the following profit function where each of the three terms represents a function

$$\pi = -40 + 140Q - 10Q^2$$

Where π stands for profit Q for level of output. Then, derivative of profit (π) with respect to output (Q) is

$$\begin{aligned}\frac{d\pi}{dQ} &= 0 + 140 - 20Q \\ &= 140 - 20Q\end{aligned}$$

Note that derivative of a constant (-40) is zero, derivative of 140 Q is 140 and derivative $10 Q^2 = 20Q$

(v) Derivative of a Product of the Two Functions

Suppose Y is the product of the two separate functions f(X) and g(X)

$$Y = f(X).g(X)$$

The derivative of the product of these two functions is equal to the first function multiplied by the derivative of the second function plus the second function multiplied by the derivative of the first function. Thus,

$$\frac{dY}{dX} = f(X) \cdot \frac{dg(X)}{dX} + g(X) \cdot \frac{df(X)}{dX}$$

For example, take the following function

$$Y = 5X^2 (2X + 3)$$

f(X) = $5X^2$ and g(X) = $(2X + 3)$ are the two functions. Then, derivative of the product of these two functions,

$$\frac{dY}{dX} = 5X^2 \cdot \frac{d(2X + 3)}{dX} + (2X + 3) \cdot \frac{d(5X^2)}{dX}$$

$$\frac{dY}{dX} = 5X^2 \cdot 2 + (2X + 3) \cdot 10X$$

$$= 10X^2 + 20X^2 + 30X$$

$$= 30X^2 + 30X$$

$$= 30(X^2 + X)$$

Take another example of the product rule, Let

$$Y = (X^3 + X^2 + 5) (2X^2 + 3)$$

$$\text{then, } \frac{dY}{dX} = (X^3 + X^2 + 5) \cdot \frac{d(2X^2 + 3)}{dX} + (2X^2 + 3) \cdot \frac{d(X^3 + X^2 + 5)}{dX}$$

$$= (X^3 + X^2 + 5) \cdot 4X + (2X^2 + 3) \cdot (3X^2 + 2X)$$

$$= (4X^4 + 4X^3 + 20X) + 6X^4 + 9X^2 + 4X^3 + 6X$$

$$= 10X^4 + 8X^3 + 9X^2 + 26X$$

1.3.2 Application of Derivatives to find Total Average and Marginal Cost and Revenue Functions

Q16. Explain the applications of derivatives.

Ans :

Applications

The use of derivatives in economics is one that is indispensable.

Some key uses of derivatives in economics are:

1. Marginal cost, Marginal revenue and Marginal profit**(i) Marginal cost**

The first derivative of the cost function is called marginal cost. At each level of production and time period being considered, marginal costs include all costs that vary with the level of production, whereas other costs that do not vary with

Production are fixed and thus have no marginal cost.

$$\text{Marginal cost} = \frac{\text{Change in TC}}{\text{Change in Quantity}}$$

(ii) Marginal Revenue

The first derivative of the revenue function gives us marginal revenue.

$$\text{Marginal revenue} = \frac{\text{Change in TR}}{\text{Change in Quantity}}$$

$$MR(Q) = dR/dQ$$

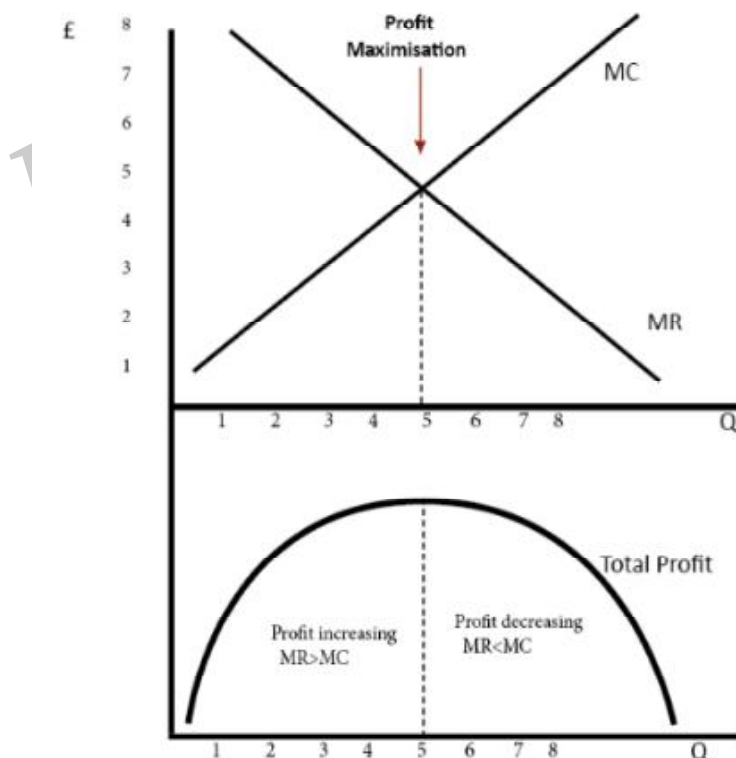
(iii) Marginal Profit

The first derivative of the profit function is marginal profit.

$$MP(Q) = dP/dQ$$

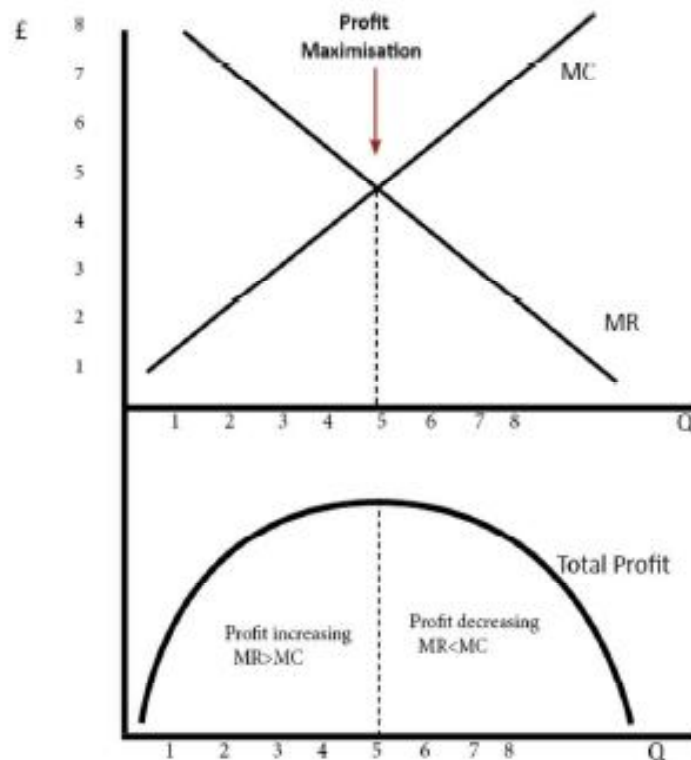
Marginal profit can also be obtained by subtracting the derivative of marginal cost from the derivative of marginal revenue.

$$MP = MR - MC$$



2. Profit maximisation

- An assumption in classical economics is that firms seek to maximize profits.
- Profit = Total Revenue (TR) – Total Costs (TC).
- Therefore, profit maximisation occurs at the biggest gap between total revenue and total costs.
- A firm can maximize profits if it produces at an output where marginal revenue (MR) = marginal cost (MC)

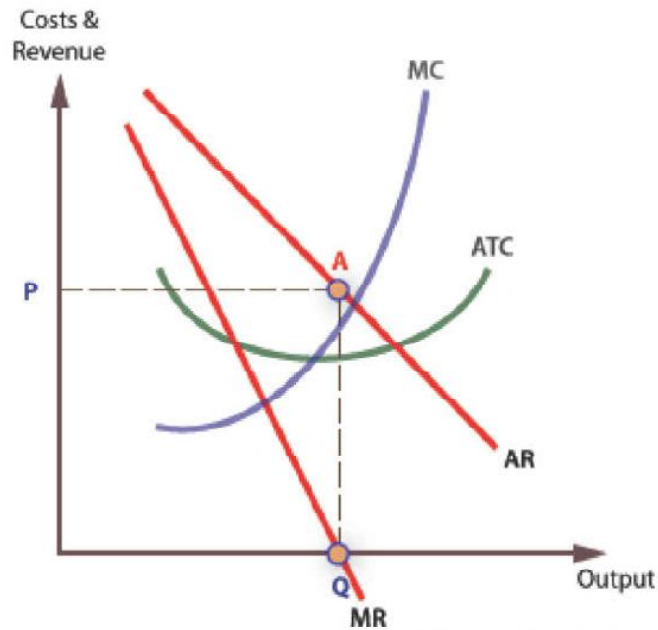


3. Revenue maximisation

Revenue maximisation is a theoretical objective of a firm which attempts to sell at a price which achieves the greatest sales revenue. This would occur at the point where the extra revenue from selling the last marginal unit (i.e. the marginal revenue, MR, equals zero).

If marginal revenue is positive, an extra unit sold must add to total revenue and revenue maximisation will not have been reached. Only when marginal revenue is zero will total revenue have been maximized.

Stopping short of this quantity means that an opportunity for more revenue has been lost, whereas increasing sales beyond this quantity means that MR becomes negative and TR falls. This can be seen in the following graph, with revenue maximisation at output Q, and at point A on the AR curve.



4. Cost minimization

marginal product of labor Cost is minimized at the levels of capital and labor such that the divided by the wage (w) is equal to the marginal product of capital divided by the rental price of capital (r).

cost minimized where $\frac{MP_L}{w} = \frac{MP_K}{r}$

PROBLEMS

1. Fill in the blanks in the following Table

Units of labour	Total product	Average product	Marginal product
1	-	40	-
2	-	-	48
3	138	-	-
4	-	44	-
5	-	-	24
6	210	-	-
7	-	29	-
8	-	-	27

Sol :

Units of labour	Total product	Average product (TP/Q)	Marginal product ($TP_n - TP_{n-1}$)
1	40	40	40
2	88	44	48
3	138	46	50
4	176	44	38
5	200	40	24
6	210	35	10
7	203	29	- 7
8	176	22	- 27

2. Given the total cost function $TC = 150 + 7Q + 3Q^2 + Q^3$. Find the total cost, marginal cost and variable cost if the level of output is 10 units.

Sol :

Given Total cost function = $150 + 7Q + 3Q^2 + Q^3$

Total cost = $150 + 7(10) + 3(10)^2 + 3(10)^3$

Total cost = $150 + 70 + 300 + 3000 = ₹ 3520/-$

$$\text{Marginal cost} = \frac{\Delta TVC}{\Delta Q} = a + 2bQ + 3CQ^2 + 4d^3$$

$$= 150 + 2(7)(10) + 3(3)(10)^2 + 4(10)^3$$

$$= 150 + 140 + 900 + 4000$$

Marginal cost = ₹ 5190/-

$$\text{Average cost} = \frac{TVC}{Q} = \frac{a}{Q} + \frac{bQ}{Q} + \frac{CQ^2}{Q} + \frac{dQ^3}{Q}$$

$$= \frac{150}{10} + \frac{70}{10} + \frac{300}{10} + \frac{3000}{10}$$

$$= 15 + 7 + 30 + 300$$

Average cost = ₹ 352/-

3. A carpenter makes 100 chairs per month and sells on them at Rs. 200 per piece. His expenses on rent of the shop, cost of the wood and other material are worth Rs. 5000. He employs two workers whose monthly wages are Rs. 1,200 per worker. He also pays electricity bill of about Rs. 500 p.m. He has invested Rs. 1,00,000 on machinery tools and inventory of which Rs. 56,000 is from his own funds (earlier he used to get 6% p.a as interest) and the remaining Rs. 50,000 as a loan from bank @ 9% interest p.a. Further assume, imputed cost of his own time and his own premises at Rs. 3,000 and Rs. 1,000 p.m. respectively. Compute accounting profit and Economic profit.

Sol :

Accounting Profits = Total Revenue – Explicit Cost

Economic Profits = Total Revenue – Explicit Cost – Implicit Cost

Accounting Profit = $(200 \times 100) - 5000 - (1200 \times 2) - 500 - 4500$
 $= 20,000 - 5000 - 2400 - 500 - 4500$

Accounting Profit = $20,000 - 12,400 = 17600$

Economic Profit = $20,000 - 12,400 - 3000 - 1000$

Economic Profit = Rs. 3600

4. **Mr. X turned down a job offer of Rs. 5,00,000 per annum and started his own business. He invested Rs. 50,00,000 of his own money in the business by withdrawing the money from fixed deposit which was earning an interest of 7% per annum. He is using his own building for the business on which he was getting a rent of Rs. 15,000 per month. The total revenue from the business during the first year was Rs. 85,69,000. The expenses were Rs. 60,62,000. Did Mr. X take correct decision by starting the business?**

Sol :

(Imp.)

Economic Profit = Accounting Profit – Imputed cost

Accounting profit = Revenues – Expenses
 $= 85,69,000 - 60,62,000$

Accounting profit = 25,07,000

Imputed cost = Salary + Rent + Interest
 $= 41,667 + 15,000 + 3,50,000$

Imputed cost = 4,06,667

Economic Profit = $25,07,000 - 4,06,667$

Economic Profit = 21,00,333

5. **A.M. Com Graduate quit his Rs. 5,00,000 salary job for starting a new business. He will Invest Rs. 7,00,000 of his own money, which has been in a bank account earning 8 percent interest per year. He also plans to use building he own in Hyderabad that has been rented for Rs. 209,000 per month. Revenue in the new business during the first year was Rs. 12,00,000 while other expenses were**

Advertising	Rs. 1,00,000
Taxes / Licence fee	Rs. 75,000
Salaries	Rs. 3,50,000
Supplies	Rs. 50,000

Calculate the Accounting profit and economic profit.

Sol :

(Imp.)

$$\text{Accounting Profit} = \text{Total revenue} - \text{Accounting cost}$$

$$\text{Economic Profit} = \text{Total revenue} - \text{Economic cost}$$

$$\text{Economic Cost} = \text{Accounting cost} + \text{Opportunity cost}$$

$$\begin{aligned} \text{Accounting cost} &= 1,00,000 + 75,000 + 3,50,000 + 50,000 \\ &= 5,75,000 \end{aligned}$$

$$\begin{aligned} \text{Economic cost} &= 5,75,000 + 5,00,000 + 96,000 \text{ (7,00,000)} \\ &= 11,31,000 \end{aligned}$$

$$\text{Total revenue} = 12,00,000$$

$$\begin{aligned} \text{Accounting Profit} &= \text{Total revenue} - \text{Accounting cost} \\ &= 12,00,000 - 5,75,000 \\ &= 6,25,000 \end{aligned}$$

$$\begin{aligned} \text{Economic Profit} &= \text{Total revenue} - (\text{Accounting cost} - \text{Opportunity cost}) \text{ or Economic cost} \\ &= 12,00,000 - 11,31,000 \\ &= 69,000 \end{aligned}$$

1.4 DEMAND THEORY AND ANALYSIS

Q17. Define demand. What are the objectives of demand?

Ans :

Introduction

In economic science, the term “demand” refers to the desire, backed by the necessary ability to pay. The demand for a good at a given price is the quantity of it that can be bought per unit of time at the price. There are three important things about the demand :

1. It is the quantity desired at a given price.
2. It is the demand at a price during a given time.
3. It is the quantity demanded per unit of time.

Meaning

Demand is the amount of particular economic goods or services that a consumer or group of consumers will want to purchase at a given price at a particular time.

Therefore, demand means desire backed up by adequate purchasing power to pay for the product when demanded and willingness to spend the money for the satisfaction of that desire.

$$\text{Demand} = \text{Desire to buy} + \text{Ability to pay} + \text{Willingness to pay}$$

Definitions

- i) **According to Benham**, “The demand for anything, at a given price, is amount of it, which will be bought per unit of time, at that price”.
- ii) **According to Bobber**, “By demand we mean the various quantities of a given commodity or service which consumers would buy in one market in a given period of time at various prices”.
- iii) **According to G.L. Thiekettle**, “The demand for any commodity or service is amount that will be bought at any given price per unit of time”.

Objectives**1. Demand Forecasting**

Forecasting of demand is the art of predicting demand for a product or a service at some future date on the basis of certain present and past behaviour patterns of some related events.

2. Production Planning

Demand analysis is prerequisite for the production planning of a business firm. Expansion of output of the firm should be based on the estimates of likely demand, otherwise there may be overproduction and consequent losses may have to be faced.

3. Sales Forecasting

Sales forecasting is based on the demand analysis. Promotional efforts of the firm should be based on sales forecasting.

4. Control of Business

For controlling the business on a sound footing, it is essential to have a well conceived budgeting of costs and profits that is based on the estimation of annual demand/sales and prices.

5. Inventory Control

A satisfactory control of business inventories, raw materials, intermediate goods, semi-finished product, finished product, spare parts, etc., requires satisfactory estimates of the future requirements which can be traced through demand analysis.

6. Growth and Long-Term Investment Programs

Demand analysis is necessary for determining the growth rate of the firm and its long-term investment programs and planning.

7. Economic Planning and Policy Making

Demand analysis at macro level for the nation as a whole is of a great help to the planners and policy-makers for a better planning and rational allocation of the country's

productional resources. The Government can determine its import and export policies in view of the long- term demand forecasting and estimation for various goods in the country.

Q18. Explain the various features of demand.

Ans :

Features

The various features of demand are:

a) Difference between Desire and Demand

Demand is the amount of commodity for which a consumer has the willingness and the ability to buy .These is difference between need and demand. Demand is not only the need, it also implies that the consumer has the money to purchase it.

b) Relationship between Demand and price

Demand is always at a price .unless price is stated, the amount demanded has no meaning. The consumer must know both the price and the commodity and he will tell his amount demanded.

c) Demanded at a point of time

The amount demanded must refer to some period of time such as 10 quintals of wheat per year or six shirts per year of five kilos of sugar per month .not only this, the amount demanded and the price must refer to a particular data.

Q19. Define demand curve? What are the characteristics of demand curve?

Ans :

(Imp.)

Meaning

The graphical representation of the demand schedule is known as demand curve. The demand curve always slopes downwards from left to right. This negative slope of the demand curve indicates the opposite relationship between the price and the quantity demanded.

Characteristics

The characteristics of demand curve can be summarized as follows:

1. Position of the Curve

A demand curve's position refers to its placement on a graph. Since economic analysts use the same graph to chart both a demand curve and the related, inverse supply curve, the scales representing price and quantity must remain the same. If a demand curve is positioned far to the right, it indicates a high quantity of demand from consumers at a given price. When a demand curve is low on the graph, it indicates that low prices create steady demand.

2. Slope of the Curve

The rate of change in demand over various price points gives a demand curve its slope. Demand curves can be concave, convex or form straight lines. In each case, the rate of change in quantity demanded as price decreases forms the changing angle of the curve. A steep demand curve means that price reductions only increase quantity demanded slightly, while a concave demand curve that flattens as it moves from left to right reveals an increase in quantity demanded when low prices drop even slightly lower.

3. Shifting of Curve

Shift refers to a demand curve's change in position over time. As the demand curve moves to new positions on the graph, it reveals changing trends in consumer behavior. For example, when a demand curve falls on graph from one measuring period to another, it indicates that lower prices produce the same level of demand as higher prices did during an earlier measuring period. Comparing demand curves over time allows business leaders to make important decisions about changing prices or altering supply levels to maximize profit.

Q20. Why the demand curve slope downwards from left to right ?

Ans : (Imp.)

According to traditional approach, the cause of the sloping downward trend of demand curve is the application of the law of diminishing marginal utility. Professor Marshall expresses this view. J.R. Hicks, Allen and other modern economist argue that it is due to the income effect and substitution effect. Following are the main causes, which are responsible for this relationship and downward sloping of demand curve:

1. Entry and Exit of Consumer

If the price of a particular commodity falls, some new consumers enter in the market and start purchasing the commodity. The old consumers also start consuming more of the commodity. If the price increases, new consumers withdraw and old consumers start consuming lesser commodity. The result of the consumer's behaviour is the operation of law of demand and the downward of demand curve.

2. Law of Diminishing Marginal Utility

The satisfaction derived from the consumption of successive units goes on falling, because earlier units have partly satisfied our wants. In this way, every additional unit of the commodity will give us lesser utility (satisfaction). So a consumer wants to pay lesser price for additional unit and he only purchases additional unit when the price falls. Therefore demand curve come slopes down wards.

3. Multiple Uses of Goods

If the price of the goods falls, consumers use more of those particular goods for different purpose and quantity demand increases. For example, when the price of electricity falls, consumers use electricity for different purpose.

4. Substitution Effect

When the price of any substitute good falls, the consumer gives up the dearer good and buys additional units of the cheaper good. In

the same way, when the price falls, the consumers, who are consuming other goods, are also attracted to the cheaper goods and it makes the demand curve downward slopping.

5. Income Effect

When the price of a commodity falls, the real income (purchasing power of money income) of the consumer increases. This enables the consumer to buy more units. For example, let money income of the consumer be 100, using this consumer wants to buy commodity 'X' whose price is 25 per kg. In that case consumer would buy only 4 kg. On the other hand, assuming money income to be constant (100), if the price of commodity falls to 20, he will be able to buy 5 kg. That is the real income of the consumer increases with the fall in price and vice versa.

1.4.1 Individual Demand and Market Demand

Q21. What are the determinants of Individual Demand?

Ans :

For an individual/household the amount demanded of a commodity is different at different prices. The tabular form of the amount demanded of a commodity at different price levels of the commodity, we get a demand schedule. A demand schedule at any particular time refers to the series of quantities the consumer is prepared to buy at its different prices. An imaginary demand schedule for oranges for a consumer, say A, is given in Table. This demand schedule is for an individual consumer and is, therefore, known as Individual demand schedule.

In case we have similar demand schedules for all the consumers in the market, we can then add up the quantities demanded of the commodity by these consumers at each price and get a summed up schedule called the market demand schedule.

Price of oranges (Rs.)	10	9	8	7	6
Quantity demanded of oranges (dozen)	1	3	7	11	13

Table: Demand for Oranges by Individual A

Determinants of Individual Demand

The following are the factors as determinants that affect the individual's demand for a product.

(a) Price of the Commodity Itself

The price of the product or the commodity is the basic consideration for determining the demand of a commodity with other things remaining the same. Usually, a consumer buys more of a product when its price is low and buys a fewer of it when its price is high. Thus, the demand for a commodity varies inversely with its price. A decrease in price, increases the purchasing power of the consumer, he can therefore buy more of it (Substitute effect) and the demand for the product rises.

An increase in price reduces the purchasing power of the consumer and thereby the demand for the product reduces (Income effect). When the price of the commodity increases, the demand for it decreases and as a result the demand curve slopes downwards. Therefore, an increase in price has the negative effect on demand. The inverse relation between the price and the demand for a commodity is symbolically represented as,

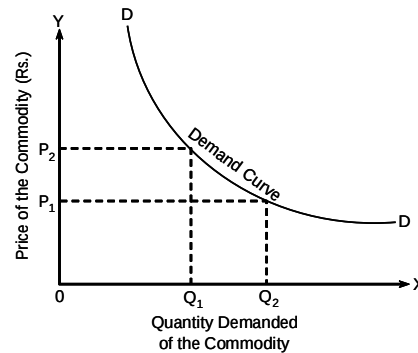
$$D = \frac{1}{P}$$

Where,

D – Demand for the commodity

P – Price of the commodity.

Graphically, it can be represented as,



In the above figure Q_1 Q_2 are the quantities demanded of the commodity at the prices P_2 and P_1 respectively i.e., if the price is P_1 (low), the quantity demanded is Q_2 , (high) and if the price is P_2 (high), the quantity demand is Q_1 (low).

In a tabular form, it is represented as

Price		Demand
Increases	$\Leftarrow$	Decreases
Decreases	$\Rightarrow$	Increases

(b) Consumer's Income

Individual consumer's income determines his/her purchasing ability. Therefore, consumer's income is an important determinant of demand. An increase in income makes an individual to buy many commodities in his purchase bundle. The effect of income on demand can be analyzed for,

- i) Normal Goods
- ii) Perishable Goods
- iii) Inferior Goods.

i) Normal Goods: Usually, the demand for a normal good goes in the same direction with consumer's income i.e., demand for normal goods is directly related to consumer's income.

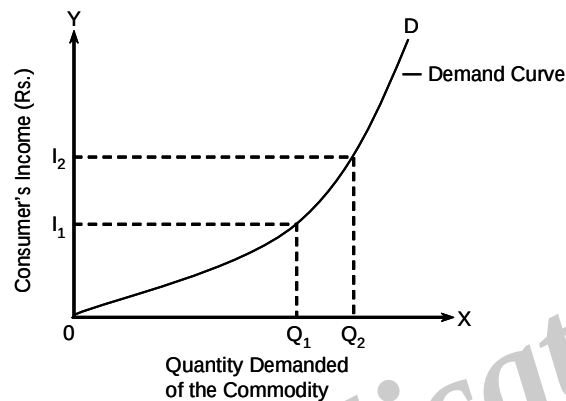
Symbolically

$$D = t$$

Where,

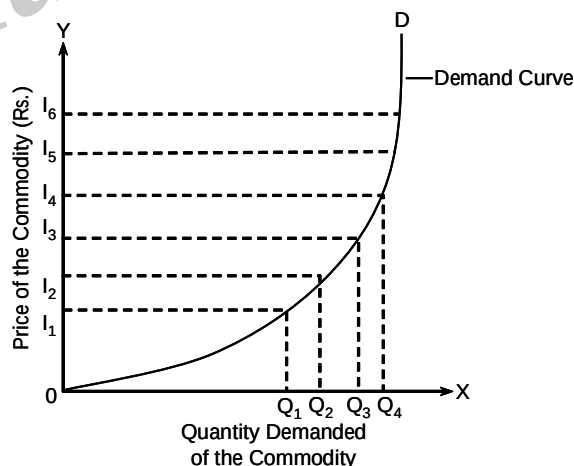
D - Demand for the commodity

t - Consumer's income.

Graphically

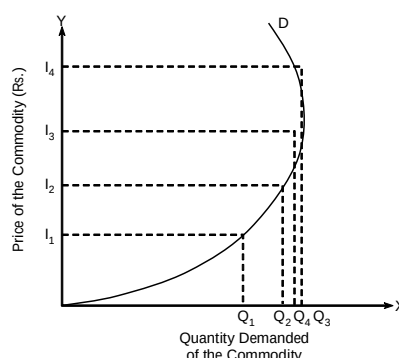
In the above figure, Q_1 , Q_2 , are the quantities demanded of the commodity at the income levels t_1 , and t_2 respectively i.e., income and demand increase/decrease in the same direction.

- ii) **Perishable Goods:** For perishable goods like foods, fruits, meat, vegetables etc., the quantity demanded raises with an increase in income, but after a certain level it remains constant even though the income raises. The demand curve for perishable goods is as follows,



In the above figure Q_1 , Q_2 , Q_3 and Q_4 are the quantities demanded at the income levels I_1 , I_2 , I_3 , I_4 , I_5 and I_6 . It is observed that the quantity demanded raises to Q_3 as income raises to I_3 . But after I_3 , even if the income increases to I_4 , I_5 and I_6 , the quantity demanded remains same at Q_4 . This indicates that the demand for perishable goods increases with income, but after a certain point, it remains constant even though the income increases.

- iii) **Inferior Goods:** The goods for which the demand decreases even though the income level increases are 'inferior goods'. The demand curve for inferior goods is as follows,



From the above figure Q_1 , Q_2 , Q_4 , Q_3 are the quantities demanded at the income levels I_1 , I_2 , I_3 and I_4 . It is observed that the quantity demanded raises from Q_1 to Q_2 and then to Q_3 as the income raises from I_1 to I_2 and I_3 . But after I_3 i.e., from I_4 as the income level increases, the demand starts decreasing. This indicates that for inferior goods, the demand decreases as the income increases.

The table below gives a clear understanding about the demand income relationship of different goods.

Type of Goods	Income	Demand
Normal Goods	Increases	Increases
Perishable Goods	Increases	Increases to a certain point and then remains constant.
Inferior Goods	Increases	Increases to a certain point and then decreases as the income increases.

(c) **Consumer's Tastes, Habits and Preferences**

Demand for many goods depends upon consumer tastes, preferences and their habits. For example, the demand for goods like chocolates, beverages, ice-creams etc., depend upon individual tastes and preferences, whereas the demand for goods like tea, betel, cigarettes etc., depend upon individual habits. In cases like, a strict vegetarian has no demand for meat at any price, whereas a non-vegetarian will purchase meat at any price. Therefore, it can be said that irrespective of price and income levels, the demand for a commodity depends upon consumer tastes, habits and preferences.

(d) **Prices of the Related Goods (Substitutes and Complementary Goods)**

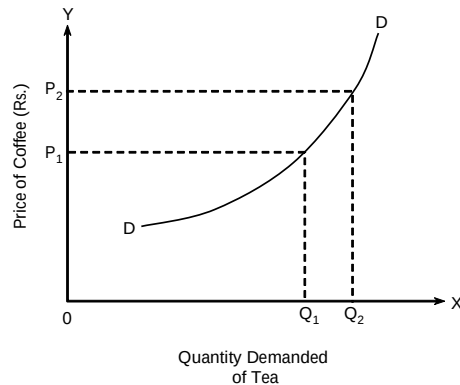
In a given market if the price of one good influences the quantity demanded of another good, these two goods are said to be related goods. Two commodities in a given market are related to each other either as Substitutes or Complementary goods.

- i) **Substitutes:** When a want can be satisfied by alternative similar goods, they are said to be substitutes to each other. In other words, when the price of one commodity and the quantity demanded of another commodity increase/ decrease in the same direction, they are called as substitutes to each other.

Examples

Tea and Coffee, Apple and Pears, Rail and Road Transport, Peas and Beans, Groundnut oil and til oil, Jowar and Bajra etc.,

The demand curve for substitute goods is as follows,



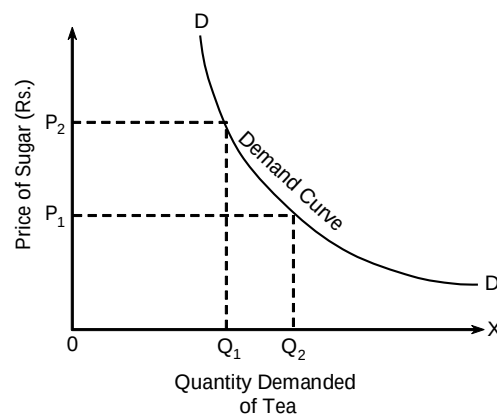
From the above graph, it is observed that as the price of coffee increases, the quantity demanded of tea is increased.

- ii) **Complementary** : When a want can be satisfied by two or more goods in combination, these goods are termed as complementary goods. In other words, when the price of one commodity and the quantity of demanded of another commodity increase or decrease in the opposite direction, they are called as complementary goods.

Examples

Bread and Butter, Pen and Ink, Car and Petrol, Tea and Sugar, Shoes and Socks, Sarees and Blouses, Gun and Bullets etc.,

Complementary goods are always in joint demand. The demand curve for complementary goods is as follows,



- (e) **Consumer Expectations:** A consumer usually makes two kinds of expectations.

- About his future income
- About prices of the given commodity and its related goods.

i) Future Income

If the consumer expects a higher income in future, he spends more on a commodity in the present and therefore, the demand for the commodity increases. If he expects a low income in future, he spends less on the commodity thereby decreasing the demand for the commodity.

ii) Future Prices

Similarly, if the consumer expects the future prices of the commodity to increase, he buys more of the commodity at present, increasing the demand for it. If he expects the future prices to fall, he buys less in the present thereby decreasing the demand for the commodity.

The table below gives a clear understanding about the changes in demand due to consumer expectations about his future income and future prices.

Consumer Expectations about Future	Changes in Demand of the the Commodity at Present
Increase in Income	Increases
Decrease in Income	Decreases
Increase in Prices	Increases
Decrease in Prices	Decreases

Table: Changes in Demand due to Consumer

f) Advertisement

In the present scenario, organizations are spending a lot of money on advertisements in order to attract consumer's tastes and preferences towards them. An effective advertisement strategy can help an organization to increase the demand for its product.

Q22. What is market demand? State its determinants.

Ans :

Meaning

When the demand of all the individuals and households for a product in a given market is considered, it is called as Market Demand or Aggregate Demand.

Determinants of Market Demand

The following are the factors or determinants that affect the demand for a commodity in a given market.

(a) Price of the Commodity Itself

With low market price, the market demand for the product increases and with high market price, the demand decreases.

(b) Income and Wealth Level in a given Market

If the income and wealth level in a given market are equally distributed, the market demand for many products increase. Unequally distributed income and wealth level reduces the market demand of a commodity.

(c) Common Habits and Preferences of a given Market

The market demand for a commodity depends upon the common habits and preferences of a given market.

(d) Standard of Living of People in a given Market

If the standard of living of people in a given market is high, then the demand for luxurious goods increases.

(e) Demographic Factors

The market demand for a product depends upon the demographic factors like - age structure, male and female ratio of the population. For example, in Vatican city of Italy, the number of men are very high when compared to women and therefore the demand is for gent's garments and accessories is high.

(f) Tax Structure

The products with high tax rate have less demand when compared to the products with low tax rate.

(g) Fads and Fashions

The demand for a commodity increases/decreases with latest fads, fashions and trends in the market. For example, the demand for jeans, skirts etc., depend upon current fashions in the market.

(h) Environmental Changes

Market demand for products is also dependent on weather and climatic conditions. For example, there is a great demand for cool drinks, fans, cotton clothes etc., during summer season and for umbrellas, rain coats etc., during rainy season.

(i) Customs and Festivals

Market demand for certain products depends upon customs and festivals. For example, during Deepawali, there is a great demand for sweets and crackers and during Christmas and New year, there is a greater demand for cakes.

In addition to these determinants of market demand, there exists other factors like - inventions and innovations, advertisement and sales propaganda, number of consumers in a given market etc.

Q23. Differentiate between Individual demand and market demand.

(OR)

Distinguish between Individual demand and market demand.

Ans :

(Imp.)

Difference between individual demand and market demand are as follows,

S.No.	Area	Individual Demand	Market Demand
1.	Definition	When the demand for a product arises from an individual consumer, then it is known as individual demand	When the demand of all the individuals and households arises for a product in a given market then it is known as market demand.
2.	Nature	It is the demand of a individual	It is the demand of number of individuals
3.	Individual demand curve V/s Market demand curve	Individual demand curve shows the maximum price which an individual consumer is willing to pay for the different amounts of the commodity under given conditions of demand.	Market demand curve shows the maximum amount of the commodity which all the consumers in a given market are willing to buy at each possible price of the commodity under given conditions of demand.
4.	Individual demand schedule V/s market demand schedule	Individual demand schedule shows the list of quantities of a commodity which was demanded by an individual at various prices.	Market demand schedule shows the list of quantities demanded by all the individuals at various prices in the market
5.	Individual and market demand function	Individual demand function is a mathematical relationship between the demand by an individual consumer and the determinants of individual demand.	Market demand function shows the functional relationship between the market demand for a commodity and the determinants of market demand.

1.4.2 Factors determining Demand

Q24. Explain the factors determining demand.

(OR)

What are the factors determining demand ?

(OR)

Discuss the factors determining demand for a commodity.

Ans :

(Imp.)

The main factors determining demand are as follows:

1. Price of the Commodity

The law of demand states that if other things remain the same, the demand of the commodity is inversely related to its price. It implies that a rise in price of a commodity brings about a fall in its purchase and vice-versa. This happens because of income and substitution effects.

2. Income of the Consumer

The income of the consumer is another important variable which influences demand. The ability to buy a commodity depends upon the income of the consumer. When the income of the consumers

increases, they buy more and when income falls they buy less. A rich consumer demands more and more goods because his purchasing power is high.

3. Tastes and Preferences

The demand for a product depends upon tastes and preferences of the consumers. If the consumers develop taste for a commodity they buy whatever may be the price. A favourable change in consumer preference will cause the demand to increase. Likewise an unfavourable change in consumer preferences will cause the demand to decrease.

4. Prices of Related Goods

The related goods are generally substitutes and complementary goods. The demand for a product is also influenced by the prices of substitutes and complements. When a want can be satisfied by alternative similar goods they are called substitutes, such as coffee and tea. When commodities are complement, a fall in the price of one (other things being equal) will cause the demand of the other to rise such as car and petrol. Thus, the price of one good and the demand for another are inversely related.

5. Advertisement and Sales Propaganda

In modern times, the preferences of consumers can be altered by advertisement and sales propaganda. Advertisement helps in increasing demand by informing the potential consumers about the availability of the product, by showing the superiority of the product, and by influencing consumer choice against the rival products. The demand for products like detergents and cosmetics is mainly caused by advertisement.

6. Consumer's Expectation

A consumer's expectation about the future changes in price and income may also affect his demand. If a consumer expects a rise in prices he may buy large quantities of that particular commodity. Similarly, if he expects its prices to fall in future, he will tend to buy less at present. Similarly, expectation of rising

income may induce him to increase his current consumption.

7. Growth of Population

The growth of population is also another important factor that affects the market demand. With the increase in population, people naturally demand more goods for their survival.

8. Weather Conditions

Seasonal factors also affect the demand. The demand for certain items purely depends on climatic and weather conditions. For example, the growing demands for cold drinks during the summer season and the demand for sweaters during the winter season.

9. Tax Rate

The tax rate also affects the demand. High tax rate would generally mean a low demand for the goods. At certain times the government restricts the consumption of a commodity and uses the tax as a weapon. A highly taxed commodity will have a lower demand.

10. Availability of Credit

The purchasing power is influenced by the availability of credit. If there is availability of cheap credit, the consumers try to spend more on consumer durables thereby the demand for certain products increase.

11. Pattern of Saving

Demand is also influenced by the pattern of saving. If people begin to save more, their demand will decrease. It means the disposable income will be less to purchase the goods and services. On the contrary, if saving is less their demand will increase.

12. Circulation of Money

An expansion or a contraction in the quantity of money will affect demand. When more money circulates among the people, more of a thing is demanded by the people because they have more purchasing power and vice versa.

1.4.3 Demand Function

Q25. What do you understand by demand functions? Explain its types.

Ans :

Meaning

A demand function is a mathematical relationship between the quantity demanded of the commodity and its determinants. A demand function can be represented as,

$$Q = f(\text{demand determinants})$$

Where,

Q = Quantity demanded of a commodity.

Types

Generally, a demand function is of two types,

1. Individual Demand Function

Individual demand function is a mathematical relationship between the demand by an individual consumer and the determinants of individual demand. Mathematically, it can be expressed as,

$$Q_x = f(P_x, I, P_1 \dots P_n, T, A, E_p, E_r, U)$$

Where,

Q_x = Quantity demanded of the commodity x

P_1 = Price of the commodity itself

I = Consumer's Income

$P_1 \dots P_n$ = Prices of the related goods

T = Consumer tastes and preferences

A = Advertisement

E_p = Consumer's expectation about future prices

E_r = Consumer's expectation about his/her future income

U = Other determinants.

An individual demand function can also be defined as the functional relationship of the quantity demanded by an individual and its determinants.

2. Market/Aggregate Demand Function

Market/Aggregate demand function is the functional relationship between the market demand for a commodity and the determinants of market demand. Mathematically it can be expressed as,

$$Q = f(P_x, I, P_1, \dots P_n, T, A, E_p, E_r, P, D, U)$$

Where,

Q_x = Quantity demanded of the commodity x.

P_x = Price of the commodity itself

I = Consumer's Income

$P_1 \dots P_n$ = Prices of the related goods

T = Consumer tastes and preferences

A = Advertisement

E_p = Consumer's expectation about future prices

E_r = Consumer's expectation about his/her future income.

P = Population or market size

D = Distribution of consumers in the market according to income, age, gender etc.

U = Other determinants.

Q26. Define law of demand. State its assumptions and exceptions.

Ans :

(Imp.)

Meaning

The law of demand states a consumer's behaviour, in demanding a commodity in relation to the variations in its prices. It expresses a functional relationship between two variables of demand relation i.e., the price and the quantity demanded of a commodity. It states the inverse relation between the quantity demanded and the price of the commodity. This makes the law of demand one of the significant laws in economics.

The conventional law of demand is given by,

$$Q_x = f(P_x)$$

Where,

Q_x = Quantity demanded of a commodity x

P_x = Price of the commodity x.

The inverse relation between demand and price is given by the law of demand as,

$$D \propto \frac{1}{P}$$

Where,

D - Demand for a commodity

P - Price of the commodity.

Law of demand generally operates due to variations in substitution effect and income of the consumer.

(i) Assumptions

- Consumer's income throughout the operation of law of demand remains unchanged.
- Consumer's tastes and preferences remain unchanged.
- No change in the fads, fashions and latest trends.
- Prices of the related goods remain unchanged or are equal.
- Consumer does not expect any changes in future prices and in his income.
- The demographic factors like age composition and gender composition remain constant.
- The climatic and weather conditions do not change.
- No change in the Government policies like level of taxation, fiscal policy etc.

(ii) Exceptions to the Law of Demand

(a) Giffen Goods (or) Giffen Paradox

Giffen goods are those inferior goods whose demand varies directly with the variations in prices i.e., there exists direct relation between the quantity demanded and the price of the commodity. Giffen goods may or may not

exist in the real world. Giffen goods are named after Sir Robert Giffen. Alfred Marshall wrote in the 1895 edition of his 'Principles of Economics' that

"As Mr. Giffen has pointed out, a rise in the price of bread makes so large a drain on the resources of the poorer labouring families and raises so much the marginal utility of money to them, that they are forced to curtail their consumption of meat and the more expensive farinaceous foods and, bread being still the cheapest food which they can and will take, they consume more and not less of it."

The studies conducted by Sir Robert Giffen on American labouring families consuming bread and meat revealed that they consumed more amount of bread even though its price increased. When the price of the bread increased, the labouring families purchased more of the bread by reducing the consumption of meat. The increase in the price of the bread forced them to reduce the consumption of meat, a more expensive food and made them to purchase more of bread, a cheapest food.

(b) Goods of Status

In some situations, certain commodities are demanded just because they are expensive or prestige goods and are usually used as status symbols to display one's wealth. Examples of such commodities are diamonds, air conditioned cars, houses etc. As the price of these commodities increase, they are more considered as status symbols and hence their demand gets raised. This goes against the law of demand which states inverse relation between price and quantity demanded.

(c) Consumer Expectations of Future Prices

If a consumer expects the future prices to be increased, he may start purchasing greater amount of the commodity even at the presently increased price. Similarly if the consumer expects the future prices to decrease, The may not purchase the

commodity thinking that the good may be of bad quality. This violates the law-of demand.

(iii) Income Effect

Decrease in the price of a superior good increases the consumer's real income in terms of goods and services, though his money income remains unchanged. Similarly, an increase in the price of a superior good decreases the consumer's real income. This makes the consumer to buy less of it and therefore the demand decreases. Therefore, an increase or a decrease in the consumer's demand for a given good lies on his/her income.

(iv) Substitution Effect

Substitution effect is also one of the reason for the downward sloping of a demand curve. When the price of a good falls with the prices of its substitutes remaining constant, the consumer buys more of this commodity by reducing the purchases of other goods in general and substitute goods in particular.

1.5 ELASTICITY OF DEMAND

Q27. What do you understand by elasticity of Demand?

Ans :

Introduction

Elasticity is one of the most important concepts in neoclassical economic theory. It is useful in understanding the incidence of indirect taxation, marginal concepts as they relate to the theory of the firm and distribution of wealth and different types of goods. Elasticity is also crucially important in any discussion of welfare distribution, in particular consumer surplus, producer surplus or government surplus.

Meaning

Elasticity of demand is the responsiveness of demand for a commodity to changes in its determinants.

Elasticity of Demand

$$= \frac{\text{Percentage change in quantity demanded of commodity}}{\text{Percentage change in its price}}$$

Definitions

- (i) **According to Dr. Marshall**, "Elasticity of Demand may be defined as the percentage change in the quantity demanded divided by the percentage change in the price."
- (ii) **According to Building**, "Price elasticity of demand measures the responsiveness of the quantity demanded to the change in price."
- (iii) **According to Dooley**, "The price elasticity of demand measures the responsiveness of the quantity demanded to a change in its price."
- (iv) **According to Antol Murad**, "Elasticity of demand is the ratio of relative change in quantity to relative change in price."

Thus, price elasticity of demand is a device to measure the rate of change in the quantity of a product demanded in response to a small change in its price.

Q28. Explain Significance of Elasticity of Demand.

Ans :

Elasticity of demand is a crucial concept in the spheres of trade, commerce and finance. The following are some of the important of elasticity of demand:

1. Price Determination

The doctrine of elasticity of demand plays a vital role in price determination. The sellers increase prices if the demand is less elastic and lower prices if the demand is elastic.

2. Monopoly Market

For a monopolist to optimize his profits, he must know the elasticity of demand for his products. In other words, the degree of monopoly can be measured with the help of elasticity of demand. A monopolist can

perform price discrimination only when he is aware of price elasticity for his commodities. A prudent monopolist increases prices in the inelastic market and lowers prices in the elastic market. In addition, the concept of price elasticity of demand plays a vital role in dumping practice as well.

Example

Oil producing countries tend to increase price by cutting down oil production. When the oil production is reduced, an artificial scarcity is created; consequently, the price is increased. This is possible as long as the oil products are price inelastic.

3. Pricing Public Utilities

Many of the public utilities are necessities. For instance, supply of water, electricity, transport and so on is essential for our everyday activities. Therefore, the demand for these utilities is price inelastic. The concept of elasticity of demand helps the government to rationalize prices for these important utilities. Otherwise, prices for these utilities will be very high, if they are provided by private entities.

4. Currency Devaluation

The application of elasticity of demand can be extended to the analysis of currency devaluation. Devaluation helps to increase exports. It is possible only when the demand for exported goods is highly elastic. If the demand is inelastic, there will not be any use in currency devaluation.

Q29. Explain Factors affecting Elasticity of Demand.

Ans :

Elasticity is governed by a number of factors. Change in any one of these factors is likely to affect the elasticity of demand. The factors are:

(a) Nature of Product

Based on their nature, the products and services are classified into necessities, comforts and luxuries. Necessaries imply the absolute or basic necessities such as food, clothing,

housing. Comforts refer to TV, refrigerator and so on. Luxuries, means sofa sets, marble flooring in a house and such others. The meaning and definition of these necessities, luxuries and comforts change from person to person, time to time and place to place. For example, a scooter may be a comfort or luxury for a student but when he does a part-time job, it may be a necessity for him.

The nature of product has a significant impact on the elasticity of demand. For instance, if there is an increase in the price of rice, we still buy it because it is a necessity for us. This means that the demand is inelastic to price. Though there is an increase in price, we tend to buy the necessities such as petrol, diesel and so on. In other words, the demand does not fall because of increase in price. From this, we can say that the necessities have inelastic demand. For comforts and luxuries, the demand is relatively elastic. It means that any increase in the price of comforts or luxuries will lead to moderate to significant fall in their demand.

(b) Time Frame

The more the time available for the customer, the demand for a particular product will be elastic and vice versa. Take the case of vegetables. When you do not have time, you go to a nearby shop and buy whatever you want at the given price. Had you had little free time, you would have preferred to get the same from a vegetable market at lesser price.

(c) Degree of Postponement

Where the product consumption can be postponed, the product is said to have elastic demand and where it cannot be postponed, it is said to have inelastic demand. The consumption of necessities cannot be postponed and hence they have inelastic demand.

(d) Number of Alternative uses

If the number of alternative uses are more, the demand is said to be highly inelastic and vice versa. Take the case of power or

electricity. It is used for a number of alternative uses such as running of machines in industries, offices, households, trains, and so on.

(e) Tastes and Preferences of the Consumer

Where the customer is particular about his taste and preferences, the product is said to be inelastic. For the customers who are particular or loyal to certain brands such as Colgate, Tata Tea, Annapurna Atta, and so on, price increases do not matter. They tend to buy that brand inspite of the price changes.

(f) In case of Complementaries (or) Joint Goods

In case of complementaries or goods having joint demand, the elasticity is comparatively low.

(g) Level of Prices

If the price is very expensive (such as diamonds) or very cheap (such as salt), then the product is likely to have an inelastic demand. If the price is too high, a fall in it will not increase the demand much. Similarly, if the price is too low, a further fall in its price is not likely to result in more demand. The demand of the relatively poor people is more sensitive to price changes. In order to derive maximum satisfaction from their limited income, they try to plan their purchases in response to changes in prices. The rich may not bother about price changes.

(h) Availability of Subsidies

Subsidy refers to money paid by a government or other public authority in order to help a company financially or to make something cheaper for the public. There is need for subsidies in case of goods with inelastic demand such as LPG, sugar, wheat and so on.

(i) Expectation of Prices

Where people expect a fall in the price, the demand for the product is likely to be inelastic.

(j) Durability of the Product

Where the product is durable in case of consumer durables such as TV, the demand is elastic. In the case of perishable goods such as milk, the demand is inelastic.

(k) Government Policy

Where the government policy is liberal, the product is likely to have elastic demand and vice versa. Government, in the interest of the lower income group consumers, closely monitors the prices of certain products (such as, ration goods as sold in fair price shops are likely to have inelastic demand). Also, another example could be taxes. Government can raise tax collections with a little reduction in the tax rates.

Q30. State different types of elasticity of demand.

Ans :

The Elasticity of demand tells you how much the demand will change with the change in price to demand to the change in any factor.

1. Price Elasticity of Demand
2. Income Elasticity of Demand
3. Cross Elasticity of Demand

1.5.1 Price Elasticity of Demand

Q31. What is price elasticity of demand ? Explain different types of price elasticity of Demand?

Ans :

(Imp.)

Meaning

The concept of price elasticity of demand was developed by Alfred Marshall. Price elasticity of demand is a technical term used by economist to explain the degree of responsiveness of the demand for a product to a change in its price.

“Price elasticity of demand is the responsiveness of quantity demanded of a commodity to a given change in price”.

$$\text{Price elasticity of demand} = \frac{\text{Proportionate change in the quantity demanded for product A}}{\text{Proportionate change in the price of B}}$$

The same is expressed as, $E_{dp} = \frac{(Q_2 - Q_1) / Q_1}{P_2 - P_1 / P_1}$

Where,

Q_1 = Quantity demanded before price change

Q_2 = Quantity demanded after price change

P_1 = Price before change

P_2 = Price after change

E > 1 (Elastic Demand)	– Percentage change in quantity demanded greater than percentage change in revenue price increase.
E = 1 (Unity Elasticity)	– Percentage change in quantity demanded is equal to percentage change in price revenue remain unchanged.
E < 1 (Inelastic Demand)	– Percentage change in quantity demanded is less than percentage change in price revenue decreased.

Table : Price Elasticity of Demand

Types

- Perfectly Elastic Demand
- Perfectly Inelastic Demand
- Relatively Elastic Demand
- Relatively Inelastic Demand
- Unity Elasticity Demand

(a) Perfectly Elastic Demand

When any quantity can be sold at given price, and when there is no need to reduce price, the demand is said to be perfectly elastic. In such cases, even a small increase in price will lead to complete fall in demand.

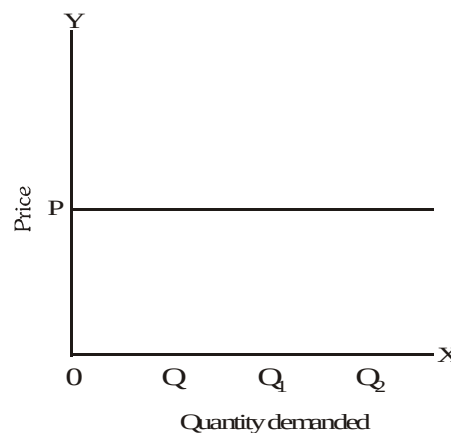


Fig.: Perfectly Elastic Demand

(b) Perfectly Inelastic Demand

When a significant degree of change in price leads to little or no change in the quantity demanded, then the elasticity is said to be perfectly inelastic.

In other words, the demand is said to be perfectly inelastic when there is no change in the quantity demanded even though there is a big change (increase or decrease) in price.

Figure below reveals that there is no change in the quantity demanded though there is change in price, say increase or decrease. In other words, despite the increase in price from OP to OP_1 , the quantity demanded has not fallen down. Similarly, though there is a fall in the price from OP_3 to OP_2 , the quantity demanded remains unchanged.

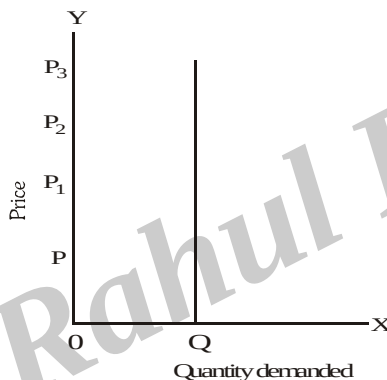


Fig.: Perfectly Inelastic Demand

The concepts of perfectly elastic and perfectly inelastic demand do not manifest in real life.

(c) Relatively Elastic Demand

The demand is said to be relatively elastic when the change in demand is more than the change in price. Figure below reveals that the quantity demanded increases from OQ_1 to OQ_2 because of a decrease in price from OP_1 to OP_2 . The extent of increase in the quantity demanded is greater than the extent of fall in the price.

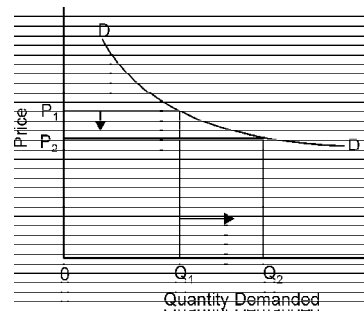


Fig.: Relatively Elastic Demand

(d) Relatively Inelastic Demand

The demand is said to be relatively inelastic when the change in demand is less than the change in the price. This is illustrated in fig. below.

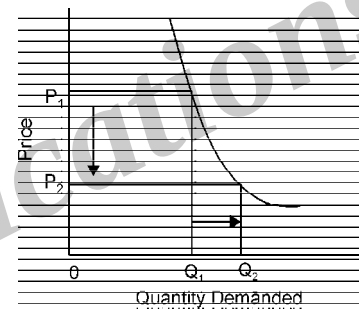


Fig.: Relatively Inelastic Demand

Figure above reveals that the quantity demanded increases from OQ_1 to OQ_2 because of a degree in price from OP_1 to OP_2 . The extent of increase in the quantity demanded is lesser than the extent of fall in the price.

(e) Unity Elasticity Demand

The elasticity in demand is said to be unity when the change in demand is equal to the change in price. This is illustrated in fig. below.

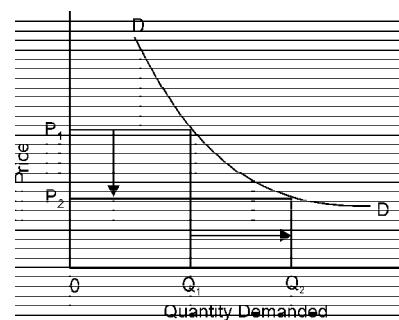


Fig.: Unity Elasticity

Figure above reveals that the quantity demanded increases from OQ_1 to OQ_2 because of a decrease in price from OP_1 to OP_2 . The extent of increase in the quantity demanded is equal to the extent of fall in the price.

Q32. Discuss the role of price elasticity of demand in managerial decision making.

Ans : (Imp.)

The concept of price elasticity of demand has important practical applications in managerial decision-making. A business man has often to consider whether a lowering of price will lead to an increase in the demand for his product, and if so, to what extent and whether his profits would increase as a result thereof. Here the concept of elasticity of demand becomes crucial.

Knowledge of the nature of the elasticity of demand for his products will help a business to decide whether he should cut his price in a particular case. Such knowledge would also help a businessman to determine whether and to what extent the increase in costs could be passed on to the consumer. In general for items those whose demand is elastic it will pay him to charge relatively low prices, while on those whose demand is elastic, it would be better off with a higher price. A monopolist would not be able to increase his price if the demand for his product is elastic.

In practice, an accurate estimate of the probable response of volume of sales to price changes is extremely difficult. Moreover, the cost of the statistical analysis required may in some cases, exceed the benefit especially when uncertainty is great or when the volume is too small to provide a reason also return on the amount spend on research. The subjective judgment of certain managers, beyond on years of experience, sometimes exceeds in accuracy the best of the present statistical techniques. Uses of price elasticity can be point out as below:

1. Price distribution

A monopolist adopts a price discrimination policy only when the elasticity of demand of different consumers or sub-markets is different. Consumers whose demand is inelastic can be charged a higher price than those with more elastic demand.

2. Public utility pricing

In case of public utilities which are run as monopoly undertakings e.g. elasticity of water supply railways postal services, price discrimination is generally practiced, charging higher prices from consumers or users with inelastic demand and lower prices in case of elastic demand.

3. Joint supply

Certain goods, being products of the same process are jointly supplied, e.g. wool and mutton. Here if the demand for wool is inelastic compared to the demand for mutton, a higher price for wool can be charged with advantage.

4. Super Markets

Super-markets are a combined set of shops run by a single organization selling a wide range of goods. They are supposed to sell commodities at lower prices than charged by shopkeepers in the bazaar. Hence, price policy adopted is to charge slightly lower price for goods with elastic demand.

5. Use of machine

Workers often oppose use of machines out of fear of unemployment. Machines need not always reduce demand for labor as this depends on price elasticity of demand for the commodity produced. When machines reduce costs and hence price of products, if the products demand is elastic, the demand will go up, production will have to be increased and more workers may be employed for the product is inelastic, machines will lead to unemployment as lower prices will not increase the demand.

6. Factor pricing

The factors having price inelastic demand can obtain a higher price than those with elastic demand. Workers producing products having inelastic demand can easily get their wages raised.

7. International trade

- (a) A country benefits from exports of products as have price inelastic demand for a rise in price and elastic demand for a fall in price.
- (b) The demand for imports should be inelastic for a fall in price and elastic for a rise in price.
- (c) While deciding whether to devalue a country's currency or not, price elasticity of demand for a country's exports would be an important factor to be taken into consideration. If the demand is price elastic, it would lead to an increase in the country's exports and devaluation would fail to achieve its objective.

8. Shifting of tax burden

It is possible for a business to shift a commodity tax in case of inelastic demand to his customers. But if the demand is elastic, he will have to bear the tax burden himself, otherwise demand for his goods will go down sharply.

9. Taxation policy

Government can easily raise tax revenue by taxing commodities which are price inelastic.

Q33. Explain briefly about Measurement of Elasticity of Demand.

Ans :

(Imp.)

Elasticity of demand can be measured in two ways,

1. Point elasticity of demand
2. Arc elasticity of demand.

1. Point Elasticity of Demand

The elasticity of demand at a particular point on the demand curve is known as 'point elasticity of demand'. The point elasticity of demand is given by the equation.

$$\epsilon_d = \frac{\text{Proportionate change in the quantity demanded}}{\text{Proportionate change in the determinant of demand under consideration}}$$

$$\Rightarrow \epsilon_d = \frac{\Delta Q / Q}{\Delta Z / Z}$$

$$\therefore \epsilon_d = \frac{\Delta Q}{\Delta Z} \cdot \frac{Z}{Q}$$

Where,

ϵ_d - Point elasticity of demand

ΔQ - Proportionate change in the quantity demanded

Q - Quantity demanded

Z - Determinant of demand under consideration

ΔZ - Proportionate change in the determinant under consideration.

For a very small value of ΔZ , the value of $(\Delta Q/\Delta Z)$ is equal to the slope of the demand curve in the neighbourhood of original Z and Q .

i.e., Where $Z \rightarrow 0$ (“ $\rightarrow$ ” means “tends to”)

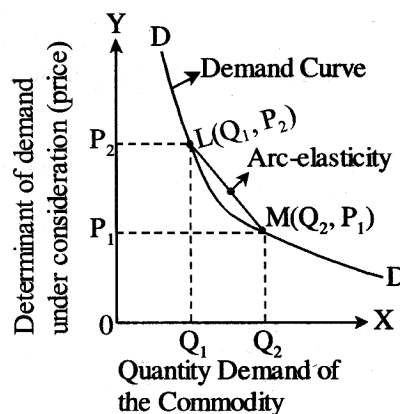
$$\text{Then, } \lim_{Z \rightarrow 0} \frac{\Delta Q}{\Delta Z} = \frac{dQ}{dZ}$$

$$\Rightarrow \frac{\Delta Q}{\Delta Z} = \frac{dQ}{dZ}$$

$$\therefore \epsilon_d = \frac{dQ}{dZ} \cdot \frac{Z}{Q} \quad [\text{From equation (1)}]$$

2. Arc Elasticity of Demand

When the elasticity of demand is measured for the entire demand curve, it is known as ‘arc elasticity of demand’. The arc elasticity of demand is the average elasticity. It is the elasticity at the midpoint of the chord which connects the initial and new point on the demand curve. Arc elasticity of a demand curve is denoted in the below.



In the above figure, the coordinates of the chord LM are are (Q_1, P_2) and (Q_2, P_1) . Therefore, arc elasticity is obtained at the midpoint of the chord LM which is ,

$$\left[\frac{P_1 + P_2}{2}, \frac{Q_1 + Q_2}{2} \right]$$

$\therefore$ Arc elasticity of demand (ϵ),

Where,

ΔQ – Proportionate change in quantity demanded

ΔP – Proportionate change in determinant price.

$$\epsilon = \frac{\Delta Q}{\Delta P} \cdot \frac{(P_1 + P_2)/2}{(Q_1 + Q_2)/2}$$

$$\therefore \epsilon = \frac{\Delta Q}{\Delta P} \cdot \frac{(P_1 + P_2)}{(Q_1 + Q_2)}$$

1.5.2 Income Elasticity of Demand**Q34. Define Income elasticity of demand.****(OR)****Discuss Income elasticity of demand.****(OR)****What do you understand by Income elasticity of demand ?****Ans :****(Imp.)****Meaning**

Consumer's income is one of the important determinants of demand. Income elasticity of demand is the measure of the extent to which a consumer's demand for a commodity changes as a result of changes in his income. Income elasticity of demand is defined as the ratio of proportionate/percentage change in the quantity demanded of a commodity to the proportionate/percentage change in the consumer's income. Mathematically, it is represented as,

$$\epsilon_1 = \frac{\text{Percentage change in the quantity demanded}}{\text{Percentage change in consumer's income}}$$

$$\epsilon_1 = \frac{\Delta Q / Q_1}{\Delta I / I_1} = \frac{\Delta Q}{\Delta I} \cdot \frac{I_1}{Q_1}$$

Where,

 ϵ_1 = Income elasticity of demand ΔQ = Percentage change in the quantity demand. Q_1 = Initial quantity demanded of a commodity. ΔI = Percentage change in the consumer's income I = Consumer's initial income.

Income elasticity of demand is also given by,

$$\epsilon_1 = \frac{(Q_2 - Q_1) / Q_1}{(I_2 - I_1) / I_1}$$

Where,

 Q_2 – New quantity demanded I_2 – Consumer's new income.

Consider an example as follows,

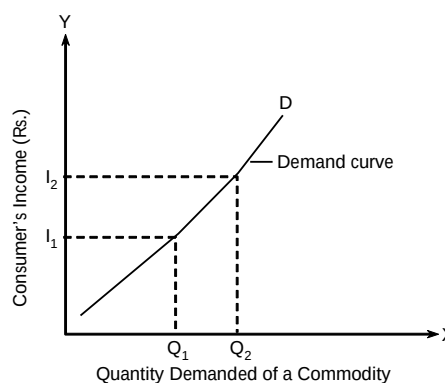
 $I_1 = ₹6,000$ $Q_1 = 50$ units $I_2 = ₹7,000$ $Q_2 = 60$ units

$$\begin{aligned} \therefore \epsilon_1 &= \frac{(Q_2 - Q_1) / Q_1}{(I_2 - I_1) / I_1} = \frac{Q_2 - Q_1}{I_2 - I_1} \cdot \frac{I_1}{Q_1} \\ &= \frac{60 - 50}{7,000 - 6,000} \cdot \frac{6,000}{50} \\ &= \frac{10}{1000} \times \frac{6,000}{50} = 1.2 \end{aligned}$$

 $\therefore$ Income elasticity $\epsilon_1 = 1.2$.

Income elasticity of demand for normal goods is positive, as the consumer's demand for a commodity goes in the same direction with his income. Whereas, income elasticity for inferior goods is negative as the demand for inferior goods varies inversely with consumer's income.

The demand curve for income elasticity of demand is,

**Q35. How do you classify goods depending upon the Income Elasticity ?****Ans :****(i) Normal Goods ($E > 0$)**

These are goods whose consumption increases with an increase in income.

A good example of a normal good is the type

of clothes you buy. While you are in college and your income is low, you may shop at Wall-Mart for your clothing. However, after you complete your degree, and you are making a lot of money as an economist, you are more likely to buy more expensive clothes from retailers in a shopping mall. In other words, your consumption increases as your income increases as you buy more expensive clothing.

(ii) Necessity ($E < 1$)

These are goods whose consumption increases an amount smaller than an increase in income.

An example of a necessity is drinking water. While you may upgrade to Dasani from Sam's Choice with an increase in income, however, it is unlikely that your consumption of water will increase an amount more than your increase income. For instance, if your income were to increase by 25 percent, you will probably not consume 25 percent more drinking water.

(iii) Luxury Good ($E > 1$)

These are goods whose consumption increases an amount larger than an increase in income.

An example of a luxury good is a round of golf. With low income, your consumption of rounds of golf will likely be zero. However, once your income rises enough to afford to play, your increase in rounds of golf will probably be higher than the increase in income. In other words, once you make enough money to play the first round of golf, your increase in round of golf consumption will be 100 percent while the increase in income may have only been 15 percent.

(iv) Inferior Good ($E < 0$)

These are goods whose consumption decreases with an increase in income.

A classic example of an inferior good is Ramen Noodles. The idea here is that you will consume fewer Ramen Noodles as your income increases. For example, after you

graduate from college, you may have higher quality (more expensive) Chinese takeout instead of Ramen Noodles for some of those quick, late night, meals.

Q36. Discuss various types of income elasticities of demand.

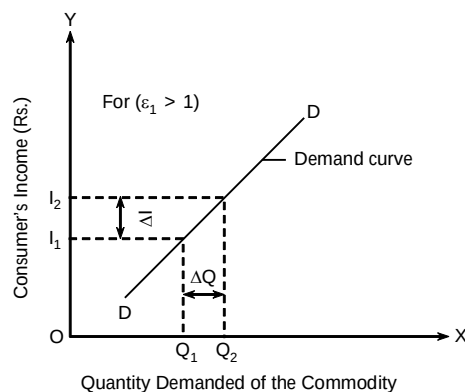
Ans :

Income elasticity of demand is categorized into five types.

- i) High income elasticity of demand
- ii) Unitary income elasticity of demand
- iii) Low income elasticity of demand
- iv) Zero income elasticity of demand
- v) Negative income elasticity of demand.

(i) High Income Elasticity of Demand

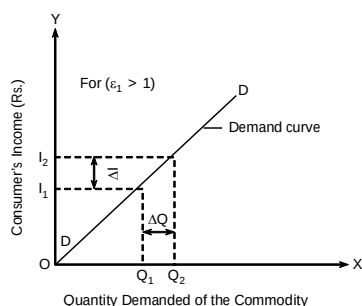
When the percentage change in the quantity demanded of a commodity is greater than the percentage change in the consumer's income, then the income elasticity of demand is high. The elasticity coefficient for high income elasticity is greater than one i.e., ($\epsilon_1 > 1$). The demand curve is as follows,



(ii) Unitary Income Elasticity of Demand

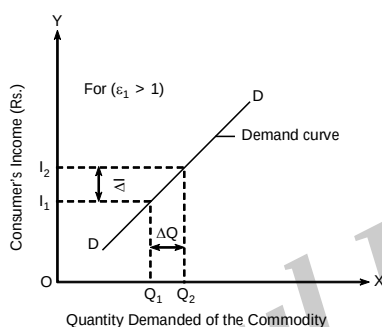
A commodity is said to possess unitary income elasticity of demand, when the percentage change in the quantity demanded of a commodity and the percentage change in the consumer's income are equal. The elasticity coefficient of unitary income elasticity is equal to one i.e.,

($\epsilon_1 = 1$) and its demand curve is at an angle of 45° as shown below,



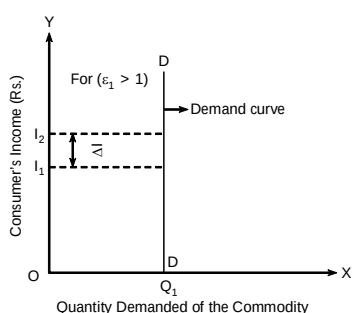
(iii) Low Income Elasticity of Demand

When the percentage change in the quantity demanded of a commodity is less than the percentage change in the consumer's income, it is called as low income elasticity of demand. The elasticity coefficient of low income elasticity is less than one ($\epsilon_1 < 1$) and the demand curve assumes the shape as follows.



(iv) Zero Income Elasticity of Demand

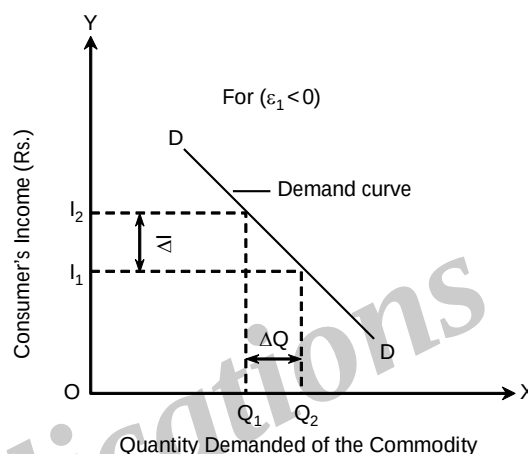
A commodity is said to have zero income elasticity of demand when a change in consumer's income has no effect on the quantity demanded of a commodity. The elasticity coefficient for zero income elasticity is equal to zero ($\epsilon_1 = 0$). The demand curve is as follows.



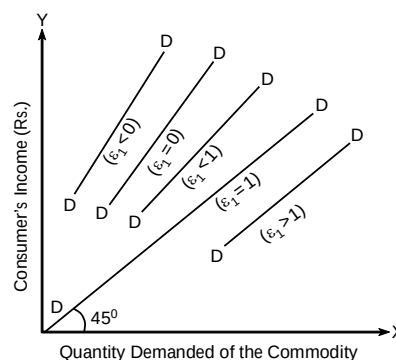
(v) Negative Income Elasticity of Demand

When an increase consumer's income causes

a decrease in the quantity demanded of a commodity and vice-versa, then the commodity is said to have negative income elasticity of demand. Example is inferior goods have negative income elasticity with elasticity coefficient less than zero ($\epsilon_1 < 0$). The demand curve is,



The figure below depicts all the income elasticities of demand.



1.5.3 Cross Elasticity of Demand and Decision making

Q37. Explain about cross elasticity of demand.

Ans :

(Imp.)

The change (increase or decrease) in the demand for one good in response to the change (increase or decrease) in price of the related good is called the cross elasticity of demand. Cross elasticity is always negative for complementary demand.

Example : i) Due to increase in price of sugar, the demand for tea and coffee is decreases.
Cross elasticity is positive for substitutes.

Example : ii) The demand for jeans goes up if there is an increase in the price of formal parts.

$$\text{Cross elasticity of demand} = \frac{\text{Proportionate change in quantity demanded for product B}}{\text{Proportionate change in price of product A}}$$

The same is expressed as,

$$E_{dc} = \frac{(Q_2 - Q_1)}{Q_1} \div \frac{(P_2A - P_1A)}{P_1A}$$

Where,

Q_1 = Quantity demanded before change.

Q_2 = Quantity demanded after change.

P_2 = Price before change.

P_3 = Price after change in the case of product.

Q38. What are the differences between Income elasticity of demand and cross Elasticity of demand ?

Ans :

S.No.	Income Elasticity of Demand	Cross Elasticity of Demand
(1)	When the demand for a product undergoes changes i.e., increase or decrease due to change in income is called income elasticity of demand.	The change i.e., increase or decrease in the demand for one good in response to change i.e., increase or decrease in price of the related goods is called to cross elasticity of demand.
(2)	The income elasticity of demand measures the changes in the quantity of demand.	The cross elasticity of demand measures how much demand of one good may change when price of another goods hold constant.
(3)	Income elasticity is calculated as, $= \frac{\text{Proportionate change in quantity}}{\text{Proportionate change in income}}$	Cross elasticity of demand is calculated as, $= \frac{\text{Proportionate change in quantity}}{\text{Proportionate change in price}}$
(4)	If the income elasticity of a good is positive we call them normal goods. It can be between '0' and '1', we call it income inelastic demand for goods such goods are clothing and news paper. If it is above '1', we call it income elastic demand.	If the cross elasticity is negative, then we can call, such goods as complements. Such as, popcorn and soft drinks they are consume together.
(5)	If the income elasticity is negative, it means that the income increases, the quantity demanded for these goods as inferior goods. Example : Magi Noodles, Rice, Potatos etc.	If the price elasticity is positive, than we call such goods as substitutes. Example: Pizza and burger, usually we canconsume any one.

Q39. What are the differences between Price and income elasticity of demand ?**Ans :**

S.No.	Price Elasticity of Demand	Income Elasticity of Demand
(1)	Price elasticity of demand is the responsiveness of quantity demanded of a commodity to a given change in price.	When the demand for a product undergo changes i.e., increase or decrease due to change in income is called income elasticity of demand.
(2)	It mainly depends upon the price of the product.	It mainly depend upon the consumers income.
(3)	It is measured when price of a commodity changes.	The income elasticity of demand is measured with the changes in the quantity of demand.
(4)	Price elasticity of demand is calculated as $= \frac{\text{Proportionate change in quantity}}{\text{Proportionate change in price}}$	Income elasticity of demand is calculated as $= \frac{\text{Proportionate change in quantity}}{\text{Proportionate change in income}}$
(5)	In this type, when any product price the demand of a quantity increases and if the product price increases then the demand of quantity decreases.	In this type any change product de-decreases then mand increases than the consumer income get change i.e., decreases and if the product demand decreases than the consumer income is change i.e., remain unuse or constant.

Q40. What are the differences between Price and Cross Elasticity of Demand ?**Ans :**

S.No.	Price Elasticity of Demand	Cross Elasticity of Demand
(1)	Price elasticity of demand is the responsiveness of quantity demanded of a commodity to a given change in price.	The changes i.e., increase or decrease in the demand for one good in response to change i.e., increase or decrease in price of the related goods is called cross elasticity of demand.
(2)	It is used to calculate the proportionate change which results in price and quantity relation.	It is used to calculate the proportionate change in quantity and price relation.
(3)	Price elasticity of demand is calculated as, $= \frac{\text{Proportionate change in quantity of Product A}}{\text{Proportionate change in price of Product B}}$	'Cross elasticity of demand is calculated as, $= \frac{\text{Proportionate change in quantity of Product B}}{\text{Proportionate change in price of Product A}}$
(4)	Price elasticity of demand is basically based on price of a product.	Cross elasticity of demand is basically relay on variation in price of related goods.
(5)	The price elasticity of demand measures the price of a commodity is the rate at which quantity are bought to changes as the prices changes.	The cross elasticity of demand measures the rate of responsiveness of quantity demanded of one commodity due to change in price of another commodity.

PROBLEMS

6. You are provided with the following information :

Commodity	Original Price	New Price	Original Demand	New Demand
A	20	22	100	90
B	4	24	20	16
C	180	184	80	70
D	10	12	50	44

- (i) Find the elasticity of demand for each commodity
 (ii) Show that each commodity obeys the law of demand.
 (iii) Which commodity has the greatest elasticity and which the least?

Sol. :

$$(i) \text{ Elasticity of demand} = \frac{Q_2 - Q_1}{P_2 - P_1} \times \frac{P_2 + P_1}{Q_2 + Q_1}$$

$$\begin{aligned} \text{Elasticity of A} &= \frac{90 - 100}{22 - 20} \times \frac{22 + 20}{90 + 100} \\ &= \frac{-10}{2} \times \frac{42}{190} = -1.1 \end{aligned}$$

$$\begin{aligned} \text{Elasticity of B} &= \frac{16 - 20}{24 - 4} \times \frac{24 + 4}{16 + 20} \\ &= \frac{-4}{20} \times \frac{28}{36} = -0.155 \end{aligned}$$

$$\begin{aligned} \text{Elasticity of C} &= \frac{70 - 80}{184 - 180} \times \frac{184 + 180}{70 + 80} \\ &= \frac{-10}{4} \times \frac{364}{150} = -6.06 \end{aligned}$$

$$\begin{aligned} \text{Elasticity of D} &= \frac{44 - 50}{12 - 10} \times \frac{12 + 10}{44 + 50} \\ &= \frac{-6}{2} \times \frac{22}{94} = -0.7 \end{aligned}$$

- (ii) All the products follow law of demand since there is an indirect relationship between price and quantity. As price increases demand increases in all the products.
 (iii) Product B has an elasticity of – 0.155. Her as product C has an elasticity of – 6.60.

7. Take the following demand function and work out price elasticity of demand, where price goes up from Rs.3 to Rs. 4. $Q = 200 - 15P$, where Q stands for Quantity demanded and P stands for Price.

Sol. :

Given that,

The demand function,

$$Q = 200 - 15P, P = \text{Rs. } 3, 4$$

$\therefore$ Price elasticity of demand

$$\epsilon_p = \frac{\Delta Q}{Q} \cdot \frac{P}{\Delta P} = \frac{\Delta Q}{\Delta P} \cdot \frac{P}{Q}$$

$$\frac{\Delta Q}{\Delta P} = -15$$

$$Q \text{ (at } P = \text{Rs. } 3) = 200 - 15 \times 3 = 155$$

$$Q \text{ (at } P = \text{Rs. } 4) = 200 - 15 \times 4 = 140$$

$$\therefore \epsilon_p \text{ (at } P = 3) = -15 \times \frac{3}{155} = -0.290$$

$$\epsilon_p \text{ (at } P = 4) = -15 \times \frac{4}{140} = -0.42$$

8. The international price of oil is \$ 30 per barrel and the price elasticity is constant and equal to -0.5. An oil embargo reduces the quantity available by 20 percent. Use the arc elasticity formula to calculate the percentage increase in the price of oil.

Sol. :

$$\text{Quantity } (Q_1) = x \text{ barrels}$$

$$\text{Price per barrel } (P_1) = 30 \$$$

Quantity after reduced by 20%

$$(Q_2) = x - \frac{x \times 20}{100} = \frac{4}{5} x$$

$$\text{Elasticity} = -0.5 = -\frac{1}{2}$$

Arc Elasticity of Demand (ϵ)

$$\epsilon = \frac{\Delta Q}{\Delta P} \times \frac{P_1 + P_2}{Q_1 + Q_2}$$

$$\frac{Q_1 - Q_2}{P_1 - P_2} \times \frac{P_1 + P_2}{Q_1 + Q_2}$$

$$-\frac{1}{2} = \frac{Q_1 - Q_2}{P_1 - P_2} \times \frac{P_1 + P_2}{Q_1 + Q_2}$$

$$= \frac{x - \frac{4}{5}x}{30 - P_2} \times \frac{30 + P_2}{x + \frac{4}{5}x}$$

$$= \frac{\frac{1}{5}x}{\frac{9}{5}x} \times \frac{30 + P_2}{30 - P_2}$$

$$-\frac{1}{2} = \frac{1}{9} \left(\frac{30 + P_2}{30 - P_2} \right)$$

$$-9(30 - P_2) = 2(30 + P_2)$$

$$-270 + 9P_2 = 60 + 2P_2$$

$$7P_2 = 330$$

$$P_2 = \frac{330}{7} = 47.1$$

Increase in percentage of price

$$= \frac{P_2 - P_1}{P_1} \times 100$$

$$= \frac{47.1 - 30}{30} \times 100$$

$$= \frac{17.1}{30} \times 100$$

$$= 57\%$$

1.6 ELASTICITY OF DEMAND AND DECISION MAKING

Q41. Describe the applications of Elasticity of Demand in Decision Making.

Ans : (Imp.)

Application of Price Elasticity of Demand in Business Decision

1. Price Determination

The concept of elasticity of demand is of considerable importance in pricing decisions or price determination. A businessman has to consider the elasticity of demand of that product.

If the increase in his sales is more than proportionate, to the reduction in price, his total revenue will increase and his profits might be larger.

On the other hand, if increase in demand is less than proportionate to fall in price, his total revenue will fall and his profits would be certainly less.

2. Pricing of factors of production

The concept of elasticity of demand is useful in the determination of price of factors of production. "If the demand for factors of production are more inelastic, the producers are prepare to pay more price for these factors. Likewise, if the demand for the factors of production is more elastic, the producers are prepared to pay fewer prices for the factors.

3. Pricing of factors of production

The concept of elasticity of demand is useful in the determination of price of factors of production. If the demand for factors of production are more inelastic, the producers are prepare to pay more price for these factors. Likewise, if the demand for the factors of production is more elastic, the producers are prepared to pay fewer prices for the factors.

4. Pricing of joint products

Some goods are produced jointly due to some reasons such as meat and wool production

in sheep farming or sugar and wine production in a sugar industry. It is difficult to separate the cost of production of these two goods. This makes it difficult to determine the price on the basis of cost. In such a situation, the price is determined on the basis of the elasticity of demand of these two products i.e high price is set up for the good having inelastic demand and low price for the good having elastic demand.

5. Shifting of tax burden

To what extent a producer can shift the burden of indirect tax to the buyers by increasing price of his product depends upon the degree of elasticity of demand. If the demand is inelastic the larger part of the indirect tax can be shifted upon buyers by increasing price.

On the other hand if the demand is elastic than the burden of tax will be more on the producer.

6. Taxation and subsidy policy

The government can impose higher taxes and collect more revenue if the demand for the commodity on which a tax is to be levied is inelastic. On the other hand, in case of a commodity with elastic demand high tax rates may fail to bring in the required revenue for the government. Government should provide subsidy on those goods whose demand is elastic and in the production of the commodity the law of increasing returns operates.

7. Designing of Marketing policies and strategies

Super Markets is a market where in a variety of goods are sold by a single organization. These items are generally of mass consumption. Therefore, the organization is supposed to sell commodities at lower prices than charged by shopkeepers in the other bazars. Thus, the policy adopted is to charge a slightly lower price for items whose demand is relatively elastic and the costs are covered by increased sales.

8. Public utilities

The nationalization of public utility services can also be justified with the help of elasticity of demand. Demand for public utilities such as electricity, water supply, post and telegraph, public transportation etc. is generally inelastic in nature.

If the operation of such utilities is left in the hand of private individuals, they may exploit the consumers by charging high prices. Therefore, in the interest of general public, the government owns and runs such services.

9. Explanation of paradox of poverty

Exceptionally good harvest brings poverty to the farmers and this situation is called 'Paradox of Poverty'. This paradox is easily explained by the inelastic nature of demand for most farm products. Since the demand is inelastic, prices of farm products fall sharply as a result of large increase in their supply in the year of bumper crops. Due to sharp fall in prices, the farmers get less income even by selling larger quantity. This paradox of poverty is the basis of regulation and control of farm products prices. Government fixes the minimum prices of farm products because the demand for farm products is inelastic. Thus, the concept of elasticity of demand helps the government in determining its agricultural policies.

10. Output decisions

The elasticity of demand helps the businessman to decide about production. A businessman chooses the optimum product- mix on the basis of elasticity of demand for various products. The products having more elastic demand are preferred by the businessmen. The sale of such products can be increased with a little reduction in their prices.

Rahul Publications

Short Question and Answers

1. Define the term Managerial Economics.

Ans :

Meaning

Managerial economics is a branch of economics that applies microeconomic analysis to decision methods of businesses (or) other management units.

Definitions

Managerial economics has been defined by different scholars as follows.

- (i) **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".
- (ii) **According to Mc Nair and Meriam**, "Managerial economics is the use of economic models of thought to analyze business situations".
- (iii) **According to Brigham and Pappas**, "Managerial economics is the application of economic theory and methodology to business administration practice".

2. Limitations of managerial economics.

Ans :

Though managerial economics provides solutions to various business problems, it is criticized on the following grounds.

1. Determination of demand and cost of a particular product is not always easy because of prevailing uncertain marketing conditions. The uncertainties in the environment impose a lot of difficulty for obtaining demand and cost functions accurately.
2. Marginal analysis of a product is not always a base because it may not be relevant to certain industries.
3. The forecast made by managerial economist should be accurate. But it is not possible because future is uncertain.
4. Classifying the markets practically is not possible. Even taking decisions related to the market on the basis of analysis done is impossible as the market conditions change from time to time.

3. What is firm?

Ans :

Meaning

A firm is an organization which transforms the hired input into outputs for sale. Two types of input are used by the firms, human resources (such as labour resource and entrepreneurial resource) and capital resources (such as land, man made capital, forests rivers etc.). The most important task of the firm is to purchase the resources or inputs and transform them into goods or services for sale.

4. Explain the differences between Accounting profit and Economic profit.

Ans :

(Imp.)

S.No.	Accounting Profit	Economic Profit
1.	It is the gap between total revenue and accounting cost or explicit costs.	It is the gap between total revenue and economic costs.
2.	Accounting profit does not accounts implicit or opportunity cost in its cost side.	Economic profit includes both explicit as well as implicit cost in its cost side.
3.	Accounting profit can be taken as a part of economic profit.	Economic profit can not be taken as a part of accounting profit.
4.	It is micro concept and based on accounting period.	It is macro concept and based on comprehensive market view.
5.	It is considered for income tax and measure of financial performance of a company or firm.	It is considered to determine the financial situation and basis for knowing whether or not stay in the market.

5. Define Demand.

Ans :

Meaning

Demand is the amount of particular economic goods or services that a consumer or group of consumers will want to purchase at a given price at a particular time.

Therefore, demand means desire backed up by adequate purchasing power to pay for the product when demanded and willingness to spend the money for the satisfaction of that desire.

$$\text{Demand} = \text{Desire to buy} + \text{Ability to pay} + \text{Willingness to pay}$$

Definitions

- i) **According to Benham**, "The demand for anything, at a given price, is amount of it, which will be bought per unit of time, at that price".
- ii) **According to Bobber**, "By demand we mean the various quantities of a given commodity or service which consumers would buy in one market in a given period of time at various prices".
- iii) **According to G.L. Thiekettle**, "The demand for any commodity or service is amount that will be bought at any given price per unit of time".

6. Features of Demand.

Ans :

The various features of demand are:

a) Difference between Desire and Demand

Demand is the amount of commodity for which a consumer has the willingness and the ability to buy. There is difference between need and demand. Demand is not only the need, it also implies that the consumer has the money to purchase it.

b) Relationship between Demand and price

Demand is always at a price .unless price is stated, the amount demanded has no meaning. The consumer must know both the price and the commodity and he will tell his amount demanded.

c) Demanded at a point of time

The amount demanded must refer to some period of time such as 10 quintals of wheat per year or six shirts per year of five kilos of sugar per month .not only this, the amount demanded and the price must refer to a particular data.

7. Factors determining demand

Ans :

The main factors determining demand are as follows:

1. Price of the Commodity

The law of demand states that if other things remain the same, the demand of the commodity is inversely related to its price. It implies that a rise in price of a commodity brings about a fall in its purchase and vice-versa. This happens because of income and substitution effects.

2. Income of the Consumer

The income of the consumer is another important variable which influences demand. The ability to buy a commodity depends upon the income of the consumer. When the income of the consumers increases, they buy more and when income falls they buy less. A rich consumer demands more and more goods because his purchasing power is high.

3. Tastes and Preferences

The demand for a product depends upon tastes and preferences of the consumers. If the consumers develop taste for a commodity they buy whatever may be the price. A favourable change in consumer preference will cause the demand to increase. Likewise an unfavourable change in consumer preferences will cause the demand to decrease.

4. Prices of Related Goods

The related goods are generally substitutes and complementary goods. The demand for a product is also influenced by the prices of substitutes and complements. When a want can be satisfied by alternative similar goods they are called substitutes, such as coffee and tea. When commodities are complement, a fall in the price of one (other things being equal) will cause the demand of the other to rise such as car and petrol. Thus, the price of one good and the demand for another are inversely related.

8. Define law of demand.

Ans :

Meaning

The law of demand states a consumer's behaviour, in demanding a commodity in relation to the variations in its prices. It expresses a functional relationship between two variables of demand relation i.e., the price and the quantity demanded of a commodity. It states the inverse relation between the quantity demanded and the price of the commodity. This makes the law of demand one of the significant laws in economics.

The conventional law of demand is given by,

$$Q_x = f(P_x)$$

Where,

Q_x = Quantity demanded of a commodity x

P_x = Price of the commodity x.

9. Income Elasticity of Demand.

Ans :

Meaning

Consumer's income is one of the important determinants of demand. Income elasticity of demand is the measure of the extent to which a consumer's demand for a commodity changes as a result of changes in his income. Income elasticity of demand is defined as the ratio of proportionate/percentage change in the quantity demanded of a commodity to the proportionate/percentage change in the consumer's income. Mathematically, it is represented as,

10. Explain the characteristics and significance of managerial economics.

Ans :

Characteristics

These characteristics of Managerial Economics are :

1. Managerial economics is micro-economic in character as it concentrates only on the study of the firm and not on the working of the economy.
2. Managerial economics takes the help of macro-economics to understand and adjust to the environment in which the firm operates.
3. Managerial economics is normative rather than positive in character. It is prescriptive rather than descriptive. That is, it is concerned with the type of decisions that the firm should take in order to prosper, which involves value judgments and not a mere description of behaviour of the firm.
4. It is both conceptual and metrical. It takes the help of conceptual framework to understand and analyze the decision problems and takes the help of quantitative techniques to measure the impact of different factors and policies.
5. The contents of managerial economics are based mainly on the 'theory of firm'. It is only for the analysis of profits that help is taken of the 'theory of distribution'.

11. What are the differences between Price and income elasticity of demand ?

Ans :

S.No.	Price Elasticity of Demand	Income Elasticity of Demand
(1)	Price elasticity of demand is the responsiveness of quantity demanded of a commodity to a given change in price.	When the demand for a product undergoes changes i.e., increase or decrease due to change in income is called income elasticity of demand.

(2)	It mainly depends upon the price of the product.	It mainly depend upon the consumers income.
(3)	It is measured when price of a commodity changes.	The income elasticity of demand is measured with the changes in the quantity of demand.
(4)	Price elasticity of demand is calculated as $= \frac{\text{Proportionate change in quantity}}{\text{Proportionate change in price}}$	Income elasticity of demand is calculated as $= \frac{\text{Proportionate change in quantity}}{\text{Proportionate change in income}}$
(5)	In this type, when any product price the demand of a quantity increases and if the product price increases then the demand of quantity decreases.	In this type any change product de-decreases then mand increases than the consumer income get change i.e., decreases and if the product demand decreases than the consumer income is change i.e., remain unuse or constant.

Choose the Correct Answers

1. The fundamental economic problem faced by all societies is: [d]
(a) Unemployment (b) Inequality
(c) Poverty (d) Scarcity
2. "Capitalism" refers to: [c]
(a) The use of markets
(b) Government ownership of capital goods
(c) Private ownership of capital goods
(d) Private ownership of homes & cars
3. There are three fundamental questions every society must answer. Which of the following is/are one of these questions? [d]
(a) What goods and services are to be produced
(b) How are the goods and services to be produced
(c) Who will get the goods and services that are produced
(d) All of the above
4. Skills that embodied in a person are called [a]
(a) Human capital (b) Embodied skills
(c) Physical capital (d) Experience skills
5. "Treating an individual as typical of a group" is the definition of [b]
(a) Pure discrimination (b) Statistical discrimination
(c) Human capital (d) Specific skills
6. What is spurred by production which uses natural resources, labor, and capital? [a]
(a) Economic activity (b) Economic problem
(c) Management activity (d) All the above
7. The quantity demanded (QD) of a soft drink brand A has decreased. This could be because:
[b]
(a) A's consumers have had an increase in income.
(b) The price of A has increased.
(c) A's advertising is not as effective as in the past.
(d) The price of rival brand B has increased.

8. Demand curves in P-Q space are derived while holding constant _____. [d]
- (a) Consumer tastes and the prices of other goods.
 - (b) Incomes, tastes, and the price of the good.
 - (c) Incomes and tastes.
 - (d) Incomes, tastes, and the prices of other goods.
9. Suppose the demand for good Z goes up when the price of good Y goes down. We can say that goods Z and Y are _____. [c]
- (a) Perfect substitutes
 - (b) Unrelated goods
 - (c) Complements
 - (d) Substitutes
10. If the demand for coffee decreases as income decreases, coffee is _____. [a]
- (a) a normal good
 - (b) a complementary good
 - (c) an inferior good
 - (d) a substitute good

Fill in the blanks

1. _____ economics is a discipline which deals with the application of economic theory to business management.
2. Once the problem has been identified, the next step is to find out _____ solutions to the problem.
3. Managerial utility is given by _____
4. Profit = _____
5. The term _____ refers to the desire, backed by the necessary ability to pay.
6. The graphical representation of the demand schedule is known as _____
7. A _____ is a mathematical relationship between the quantity demanded of the commodity and its determinants
8. _____ is a crucial concept in the spheres of trade, commerce and finance.
9. The concept of price elasticity of demand was developed by _____
10. The concept of _____ is of considerable importance in pricing decisions

ANSWERS

1. Managerial
2. Alternative
3. O. Williamson
4. Total Revenue (TR) – Total Costs (TC)
5. Demand
6. Demand curve
7. Demand function
8. Elasticity of demand
9. Alfred Marshall
10. Elasticity of demand

UNIT II

PRODUCTION AND COST ANALYSIS :

Meaning of Production Function – Cobb Douglas Production Function – Production with One Variable Input – Optimal Employment of Factor of Production - Production with Two Variable Inputs-Production Iso-quant and Production Iso-Cost – Optimal Employment of Two Variable inputs – Expansion Path- Economies of Scope
Concepts of Cost – Cost Function- Short Run Cost Functions - Finding Minimum Average Variable Cost through Equations – Long Run Cost Function.

2.1 MEANING OF PRODUCTION FUNCTION

Q1. What do you understand by production? State the factors of production.

Ans :

Meaning

Production is an activity of transforming the inputs into output. It involves step-by-step conversion of one form of materials into another form through chemical (or) mechanical processing in order to create or enhance the utility or usability of the products or services.

Economics view production is as an activity through which utility for a product is created (or) enhanced.

Definition

According to E.S. Buffa, "Production is an process by which goods and services are created". In economics, the term production means a process in which the resources are transformed or converted into a different and more useful commodity (or) service. In general production means transforming inputs into an outputs. The term production is however limited to "manufacturing organizations" only.

Production i.e., transformation of inputs into output can be any of the three forms change in form, change in phase and change in time. The output produced can be either the final product (like a PC) or an intermediate product (like a semiconductor used in manufacturing a PC). The output goods or services may be either tangible or intangible. Production of a chair from wood is a tangible output whereas medical service by a doctor is an intangible output. The figure indicates the production process.

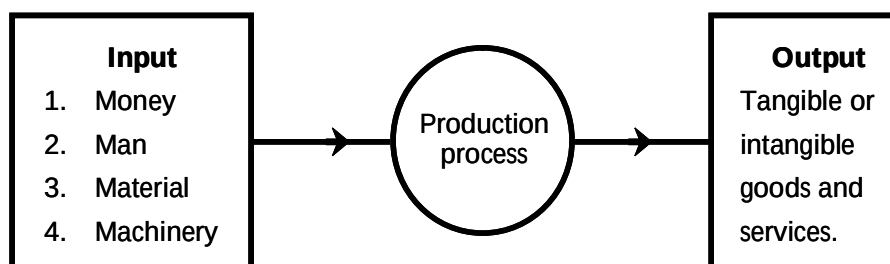


Fig.: Production Process

Factors

Factors of production are the inputs available to supply goods and services in an economy.

Factors of production are the inputs available to supply goods and services in an economy are shown in Figure.

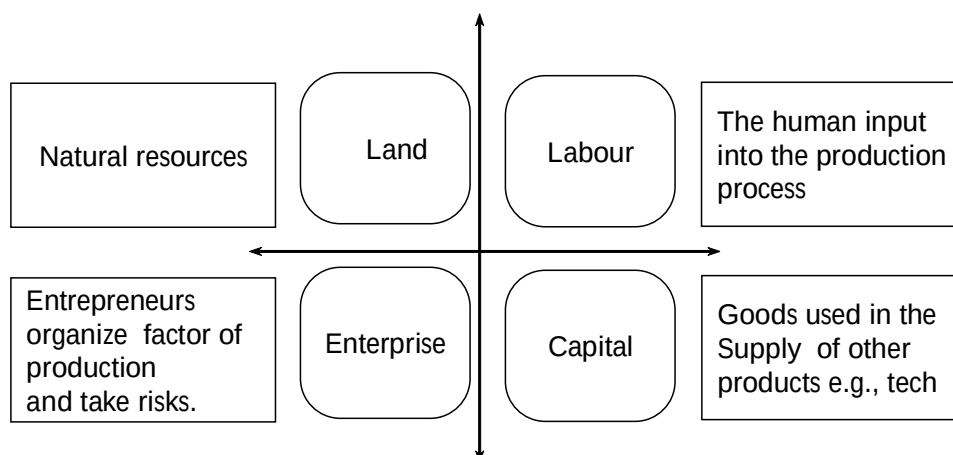


Fig.: Factors of Production (Factor Inputs)

1. Land

- (i) Land includes all natural physical resources e.g., fertile farm land, the benefits from a temperate climate (or) the harnessing of wind power and solar power and other forms of renewable energy.
- (ii) Some nations are richly endowed with natural resources and then specialize in the their extraction and production.

Example

The high productivity of the vast expanse of farm land in the United States and the oil sands in Alberta, Canada. Other countries Such as Japan are heavily reliant on importing these resources.

2. Labour

- (i) Labour is the human input into production e.g., the supply of workers available and their productivity.
- (ii) An increase in the size and the quality of the labour force is vital if a country wants to achieve growth. In recent years the issue of the migration of labour has become important. Can migrant workers help to solve labour shortages? What are the long-term effects on the countries who suffer a drain or loss of workers through migration?

3. Capital

- (i) Capital goods are used to produce other consumer goods and services in the future.
- (ii) Fixed capital includes machinery, equipment, new technology, factories and Other buildings.
- (iii) Working capital means stocks of finished and semi-finished goods or components that will be either consumed in the near future or will be made into consumer goods.
- (iv) New items of capital machinery, buildings or technology are used to boost the productivity of labour.

Example

Improved technology in farming has vastly increased productivity and allowed millions of people to move from working on the land into more valuable jobs in other industries.

4. Enterprise

- (i) Regarded by some as a specialized form of labour input.
- (ii) An entrepreneur is an individual who supplies products to a market to make a profit.
- (iii) Entrepreneurs will usually invest their own financial capital in a business and take on the risks. Their main reward is the profit made from running the business.

Q2. Define production function.**(OR)****What do you understand by production function ?****Ans :****(Imp.)****Meaning**

The production function is purely a relationship between the quantity of output obtained or given out by a production process and the quantities of different inputs used in the process. Production function can take many forms such as linear function or cubic function etc.

Definitions

- (i) **According to Michael R Baye**, "Production Function" is that function which defines the maximum amount of output that can be produced with a given set of inputs.
- (ii) **According to Samuelson**, "Production Function" is the technical relationship, which reveals the maximum amount of output capable of being produced by each and every set of inputs, under the given technology of a firm.

From the above definitions, it can be concluded that the production functions is more concerned with physical aspects of production, which is an engineering relation that expresses the maximum amount of output that can be produced with a given set of inputs.

Production function enables production manager to understand how better he can make use of technology to its greatest potential.

Mathematically, a production function is represented as,

$$Q = f(L, C, M,)$$

Where,

Q = Quantity of the output produced

f = Function of L, C, M

L = Labour units

C = Capital employed

M = Machinery raw materials.

In the above production function, the inputs considered are labour, capital and raw materials. But an empirical production function is very complex with a wide range of inputs like land, labour, capital, materials time and technology. With these inputs, the production function is expressed as,

$$Q = f\{L_d, L, C, M, T, t\}$$

Where,

Q = Quantity of the output produced

f = Function of L_d, L, C, M, T, t

L_d = Land and buildings

L = Labour units

C = Capital employed

M = Materials

T = Technology

t = Time period of production

In order to reduce the complexity, economists have considered the three main inputs - labour, capital and machinery for indicating a production function. Therefore, with these inputs the production function can be expressed as,

$$Q = f(L, C, M).$$

Q3. Explain the managerial Use of production function.

Ans :

The production function is of great help to a manager or business economist. The managerial uses of production function are outlined as below :

1. It helps to Determine Least Cost Factor Combination

The production function is a guide to the entrepreneur to determine the least cost factor combination. Profit can be maximized only by minimizing the cost of production. In order to minimize the cost of production, inputs are to be substituted. The production function helps in substituting the inputs.

2. It Helps to Determine Optimum Level of Output

The production function helps to determine the optimum level of output from a given quantity of input. In other words, it helps to arrive at the producer's equilibrium.

3. It Enables to Plan the Production

The production function helps the entrepreneur (or management) to plan the production.

4. It Helps in Decision-making

Production function is very useful to the management to take decisions regarding cost and output. It also helps in cost control and cost reduction.

In short, production function helps both in the short run and long run decision-making process.

2.2 COBB DOUGLAS PRODUCTION FUNCTION

Q4. What do you understand by Cobb Douglas production function ?

(OR)

Explain Cobb Douglas production function.

Ans :

(Imp.)

Cobb and Douglas put forth a production function relating output in American manufacturing industries from 1899 to 1922 to labour and capital inputs. They used the following formula:

$$P = bL^a C^{1-a}$$

Where P is total output,

L = The index of employment of labour in manufacturing

C = Index of fixed capital in manufacturing

The exponents a and 1-a are the elasticities of production. These measure the percentage response of output to percentage changes in labour and capital respectively.

The function estimated for the USA by Cobb and Douglas is

$$P = 1.01L^{0.75} C^{0.25}$$

$$R^2 = 0.9409$$

The production function shows that one percent change in labour input, capital remaining the same, is associated with a 0.75 percent change in output. Similarly, one percent change in capital, labour remaining the same, is associated with a 0.25 percent change in output. The coefficient of determination (R^2) means that 94 percent of the variations on the dependent variable (P) were accounted for by the variations in the independent variables (L and C). It indicates constant returns to scale which means that there are no economies or diseconomies of large scale of production. On an average, large or small scale plants are considered equally profitable in the US manufacturing industry, on the assumption that the average and marginal production costs were constant.

Though Cobb-Douglas production function was based on macro-level study, it has been very useful for interpreting economic results. Later investigations revealed that the sum of the exponents might be very slightly larger than unity, which implies decreasing costs. But the difference was so marginal that constant costs would seem to be a safe assumption for all practical purposes.

Q5. Explain the properties of cobb Douglas production function.

Ans :

The properties of Cobb-Douglas production function are,

- (i) For output (Q) to exist both labour (L) and capital (AT) should be positive and not equal to zero.

$$\text{i.e., } Q = AL^a K^{1-b}$$

if and only if $L > 0, K > 0$

- (ii) The addition of the parameters is equal to one.

$$\text{i.e., } a + 1 - b = 1$$

This indicates that the function in its original form assumes constant return to scale.

- (iii) The later version of production function is,

$$Q = AL^\alpha K^\beta$$

Here,

$$\alpha = b$$

$$\beta = 1 - b \quad \text{and} \quad \beta = 1 - \alpha$$

It specified the conditions are,

If $(\alpha + \beta) > 1$ then increasing returns to scale.

If $(\alpha + \beta) = 1$ then constant returns to scale

If $(\alpha + \beta) < 1$ then decreasing returns to scale.

- (iv) The parameters of the function represent factor shares in output.

i.e.,

$$\alpha = b = \frac{\text{Wage share}}{\text{Total income}}$$

$$\beta = 1 - \alpha = \frac{\text{Rental share}}{\text{Total income}}$$

- (v) The function helps to find out the short-run relationship between inputs and the output.

For example,

$$\text{Marginal Product of Labour (MP}_L) = \alpha(Q/L)$$

$$\text{Marginal Product of Capital (MP}_K) = \beta(Q/K)$$

- (vi) The function has important policy implications for formulating an income policy as it has the elasticity of substitution as unity.

Q6. Explain the importance of Cobb-Douglas production function.

Ans :

Cobb-Douglas production function is most popular in empirical research. The reasons for this are many :

1. The Cobb-Douglas function is convenient for international and inter-industry comparisons. Since α and β (which are partial elasticity coefficients) are pure numbers (i.e., independent of units of measurement) they can be easily used for comparing results of different samples having varied units of measurement.
2. Another advantage is that this function captures the essential non-linearities of production process and also has the benefit of the simplification of calculations by transforming the function into a linear form with the help of logarithms. The log-linear function becomes linear in its parameters, which is quite useful to a managerial economist for his analysis.

3. In addition to being elasticities, the parameters of Cobb-Douglas function also possess other attributes. **For example**, the sum of (a + P) shows the returns to scale in the production process; a and (3 represent the labour share and capital share of output respectively, and so on.
4. This function can be used to investigate the nature of long-run production function, viz., increasing, constant and decreasing returns to scale.
5. Although in its original form, Cobb-Douglas production function limits itself to handling just two inputs (e.g., L and K), it can be easily generalized for more than two inputs, like

$$Q = AX_1^a \cdot X_2^b \cdot X_3^c \dots X_n^p$$

Where, Q = Output

$X_1, X_2, \dots, X_n$ = Different inputs.

Q7. What are the criticisms of Cobb-Douglas production function ?

Ans :

1. The function includes only two factors and neglects other inputs.
2. The function assumes constant returns to scale.
3. There is the problem of measurement of capital which takes only the quantity of capital available for production.
4. The function assumes perfect competition in the factor market which is unrealistic.
5. It does not fit to all industries.
6. It is based on the substitutability of factors and neglects complementarity of factors.
7. The parameters cannot give proper and correct economic implication.

2.3 PRODUCTION WITH ONE VARIABLE INPUT

Q8. Explain the Law of Diminishing marginal returns with suitable examples and graphs.

(OR)

Describe the various stages of a total production function with the help of a diagram.

Ans :

(Imp.)

Meaning

Law of variable proportions has a great significance in economic theory. This law examines the production function with one factor (input) variable by keeping the other factors (inputs) fixed. In the true sense, it refers to the relation between input and the output when the output is increased by varying the quantity of one input.

The Law of Variable Proportions is the new name for the famous 'Law of Diminishing Returns' of classical economics which played a vital role in the history of economic thought and occupies an equally important place in modern economic theory.

Definitions

The following are the various definitions of Law of Variable Proportion or Law of Diminishing Returns as given by different economists.

- (i) **According to G. Stigler**, “as equal increments of one input are added, the inputs of other productive services being held constant, beyond a certain point the resulting increments of product will decrease i.e., the marginal products will diminish”.
- (ii) **According to Marshall defines the law as**, “an increase in the capital and labour applied in the cultivation of land causes in general is less than proportionate increase in the amount of product raised unless it happens to coincide with an improvement in the arts of agriculture”.
- (iii) **According to Paul A. Samuelson says** “an increase in some inputs relative to other fixed inputs, in a given state of technology, cause output to increase, but after a point the extra output resulting from the same addition of extra inputs will become less”.

From the above definitions, it is clear that the law of variable proportions refers to the behaviour of output as the quantity of one input is increased, keeping the quantity of other inputs as fixed. It also states that the Marginal Product (MP) and Average Product (AP) will eventually decline.

(i) Total Product (TP)

Total product is the amount of output that is produced by using different quantities of inputs.

(ii) Marginal Product (MP)

Marginal product is defined as the change in the Total Product (TP) per unit change in a variable input.

Let the variable input labour (L) be considered, then marginal product,

$$MP_L = \frac{\Delta TP}{\Delta L}$$

Where,

MP_L = Marginal product of labour

ΔTP = Change in total product

ΔL = Unit change in the labour input.

(iii) Average Product (AP)

Average product may be defined as the Total Product (TP) per unit of variable input. If the variable input 'Z,' is considered, average product is,

$$AP_L = \frac{TP}{L}$$

Where,

AP_L = Average product of labour

TP = Total product

L = Labour units

Assumptions

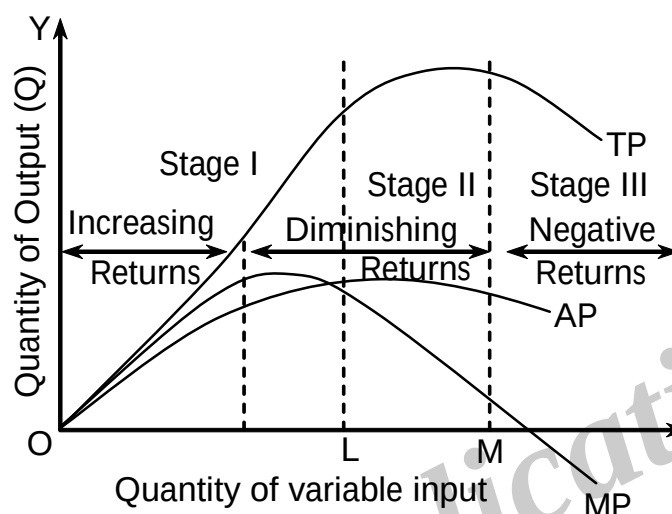
The law of variable proportions is based on the following assumptions.

- (i) The technology used in the production process should be constant. If the state of the technology used is increased, the Marginal Product (MP) and Average Product (AP) will rise instead of diminishing.
- (ii) The quantity of some of the inputs should be fixed. By doing so, the input proportions can be altered and their effect on the output can be known.
- (iii) The law does not hold in the situation where all the inputs are proportionately varied.

- (iv) The law is based on the possibility of varying the proportion in which various inputs can be combined to produce a product. The law is not applicable to those cases where the inputs must be used in fixed proportions to yield a product.

Stages

The behaviour of output when the varying quantity of one input is combined with a fixed quantity of the other can be categorized into three different stages.



TP = Total product

MP = Marginal product

AP = Average product

B = Point of inflection

Variable Product (VP)	Total Product (TP)	Marginal Product (MP)	Average Product (AP)
0	0	-	-
1	4	4	4
2	15	11	7.50
3	37	22	12.33
4	48	11	12
5	45	-3	9

In the above graph, quantity of variable input is taken on .x-axis and quantity of output is taken on y-axis and the Total Product (TP) Average Product (AP) and Marginal Product (MP) are measured. The behaviour of these three curves is as follows,

TP - Goes on increasing to a point and after that it starts declining

AP = Increases initially and later it declines

MP = Increases initially and then decreases up to a negative value.

The behaviour of these curves is generally divided into three stages.

- (i) Stage I : Increasing returns.
- (ii) Stage II : Decreasing returns.
- (iii) Stage III: Negative returns,

(i) Stage I: Increasing Returns

In this stage, the Total Product curve (*TP*) increases at an increasing rate upto point B indicating that the marginal product of the variable input (say labour (*L*)) is rising. From point B the total product curve rises but at a diminishing rate indicating the fall of marginal product but positively. The reason for the increase of total product curve both at an increasing rate and at a decreasing rate during *stage I* because the slope of *TP* upto B increases and after B it declines. The shape of *TP* upto B is concave upwards and after B it is concave downwards.

The point B where *TP* stops increasing at an increasing rate and starts increasing at a decreasing rate is called 'point of inflation'. At the point of inflation, the Marginal Product curve (*MP*) is maximum and after that it starts decreasing. When the marginal product curve decreases, it exceeds the average product curve causing the average product curve to increase. *Stage I* ends where the average product curve reaches its maximum value. *Stage I* is known as the stage of increasing returns because average product of a variable input increases throughout the stage.

(ii) Stage II: Decreasing Returns

In *stage II*, the total product continues to increase at a diminishing rate until it reaches a maximum value and marginal product and average product of the variable input decrease but positively. At the end of second stage, the marginal product of the variable input is zero and the total product is maximum. *Stage II* is very important because in this stage the firm will seek to produce in its range. *Stage II* is known as the stage of diminishing returns because both the average product and the marginal product of the variable inputs fall continuously during this stage.

(iii) Stage III: Negative Returns

In stage III the Total Product curve (*TP*) declines with an increase in the quantity of variable input. As a result, the marginal product of the variable input is negative and the Marginal Product curve (*MP*) falls below x-axis. *Stage III* is called as the stage of negative returns because all the three curves *TP*, *MP* and *AP* decline and *MP* declines to a negative value.

The below table gives a clear understanding of three stages of law of variable proportions.

Stage of Production	I	II	III
Total Product (TP)	Initially increases at an increasing rate and later increases at a decreasing rate.	Increases at a decreasing rate and becomes maximum	Decreases
Average Product (AP)	Increases and reaches maximum	Decreases	Continues to decrease
Marginal Product (MP)	Increases and reaches a maximum and starts falling.	Continues to fall and become zero	Becomes negative

Assumptions

1. **Constant technology** : If technology changes, marginal and average product may rise instead of diminishing.
2. **Short Run** : The law operates in the short run because it is here that some factors are fixed and others are variable. In the long run, all factors are variable.
3. **Homogeneous Input** : The variable input as applied unit by unit is homogeneous or identical in amount and quality.
4. It is possible to use various amounts of a variable factor on the fixed factors of production.

2.4 OPTIMAL EMPLOYMENT TO A FACTOR OF PRODUCTION

Q9. Explain the concept of Optimal employment to a factor of production.

(OR)

Explain how the optimal employment of a variable factor is achieved in the short-run.

Ans :

(Imp.)

Whatever the firm chooses to produce, it wishes to produce it at the least possible cost. Or, whatever expenditure the entrepreneur wishes to make, the highest output with that expenditure is desired. To accomplish either of the two tasks, production must be organized in the most efficient manner, i.e., the resources must be used in an optimal combination. We discuss these two cases below.

- (a) Production of Given Output at Minimum Cost:** Suppose that a road transport company wants to fulfil a certain demand for its passenger and cargo services per year. This company is confronted

with the following combinations of vehicles and mechanics for producing the desired level of output (Table). Per year costs of a vehicle and a mechanic are Rs. 1,25,000 and Rs. 3,000 respectively.

Combination number	No. of Vehicles	No. of machines
1	10	1000
2	11	900
3	12	820
4	13	770
5	14	730
6	15	700
7	16	680

Table : Cost Data of Firm X

Let us begin with combination 2. An additional vehicle would cost Rs. 1,25,000, but 100 mechanics could be reduced which would save Rs. 3,00,000. So combination 2 is better than combination 1. Similarly, moving from combination 2 to 3 and from combination 3 to 4 would result in some savings. The firm would not move to combination 5 as it does not result in cost reduction; the firm would save Rs. 1,20,000 in mechanics' salaries but add Rs. 1,25,000 in vehicle expenses.

The above analysis can also be shown graphically. Suppose that the firm wishes to choose an output level X_1 , represented by an isoquant in the figure. Given prices of capital and labour (the two inputs) $K_0 L_0$, $K_1 L_1$ and $K_2 L_2$ are the different isocost curves at different levels of expenditure. Obviously, to minimise its expenditure the firm will like to produce the desired level of output X_1 on the lowest possible isocost curve.

In the figure, output level X_1 is produced at least cost on the isocost curve A'' , L_x . At any expenditure below $K_1 L_1$ (e.g., that represented by $K_0 L_0$) it is not possible to produce the desired output level. The resource combinations, represented by $K_0 L_0$ and $K_2 L_2$, are sub-optimal as they do not produce the given level of output at least cost.

Equilibrium of the producer is reached at point E in Fig., where the isoquant representing the chosen output is just tangent to the isocost line. The tangency means the slope of the isoquant (viz., the marginal rate of technical substitution) equals the slope of the isocost line (viz., the ratio of price of labour to price of capital) at that point.

The price ratio of inputs tells the producer about the rate at which one input can be substituted for another in purchasing, while marginal rate of technical substitution tells about the rate at which these inputs can be substituted in production. Thus, to minimize cost subject to a given level of output (given input prices), the firm must purchase those amounts of the two inputs which equalise the $MRTS_{LK}$ of the inputs to their relative price (w/r), as shown at point E in Fig. 10.11. As discussed earlier, the $MRTS_{LK}$ also equals the ratio of the marginal productivities of the two inputs (viz., MP_L / MP_K). Therefore,

$$MRTS_{LK} = \frac{w}{r} = \frac{MP_L}{MP_K} \quad \text{or} \quad \frac{MP_L}{w} = \frac{MP_K}{r}.$$

The optimal combination of inputs which minimizes the cost for a given level of output is L^* of labour and K^* of capital, as given by the equilibrium point E in Fig.

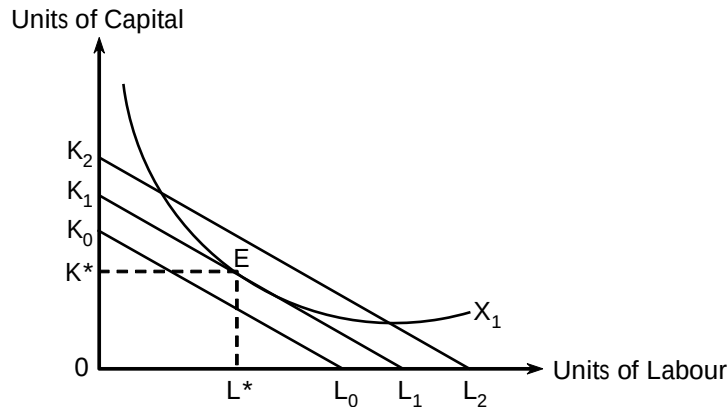


Fig.: Minimizing cost, given output

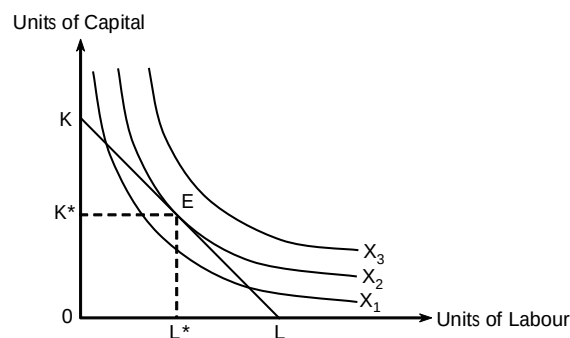
- (b) **Production of Maximum Output with a Given Level of Cost.** Alternatively, the firm may first decide about the available expenditure on the production of the commodity and then try to maximize output consistent with that amount of expenditure. Such a situation is depicted with the help of Figure. Given the budgeted expenditure and the input prices, the firm gets an isocost curve KL .

The firm wants to maximise output, subject to given resources as represented by the isocost line KL . This can be achieved where the isoquant is tangent to the isocost line. In Fig. output level X_2 is not possible to attain, while X_1 output level would not be chosen as a higher level of output X_2 can be reached with the given level of cost. All equilibrium level E , OL^* of labour and OK^* capital are used to produce X_2 output.

Thus, in order to maximise output subject to a given cost, the firm must employ inputs in such amounts as to equate the marginal rate of technical substitution and the input price ratio. That is,

Condition I : $E = wL + rK$

Condition II : $MRTS_{L,K} = \frac{w}{r} = \frac{MP_L}{MP_K}$



2.5 PRODUCTION WITH TWO VARIABLE INPUTS

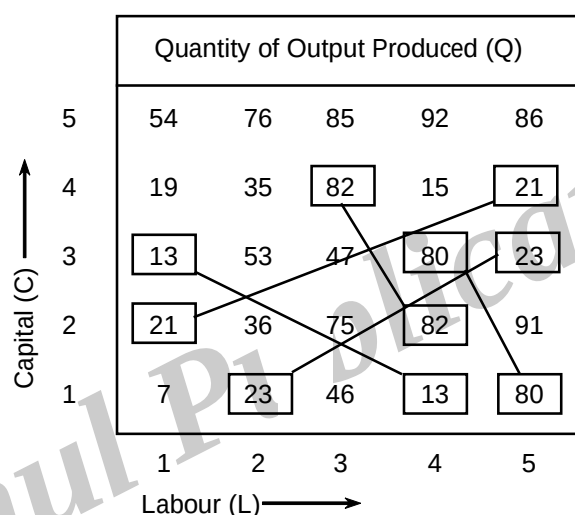
Q10. Explain production function with two variable inputs with an illustration.

Ans :

(Imp.)

Production function with two variable inputs is a more general case where the firm increases its output by using more of two inputs that are substitutes to each other. The two-variable input case may be taken either as a short-run or a long-run analysis of production process on the basis of the assumptions made about the nature of inputs used. If the firm utilizes only two inputs and both of them are variables, it is long-run analysis. If the firm uses more than two inputs and if only two of them are variable and others are fixed, it is the case of short-run analysis.

Production function with two-variable-inputs is illustrated as follows,



From the above table, if the firm wants to produce an output of 80 units, the input combination (labour, capital) it can use are (3, 4) and (1,5).

Output	Combinations
82 units	(4, 3), (2, 4)
13 units	(3, 1), (1, 4)
23 units	(1, 2), (3, 5)
21 units	(2, 1), (4, 5)

If a graph is drawn by representing the different combinations of inputs used to produce the same amount of output, it is known as an 'isoquant'. A production function with two variable inputs can be represented by a family of isoquants or isoproduct curves or product indifference curves.

The production function with two variable inputs can be represented as,

$$Q = f(L, C)$$

Where,

Q = Quantity of output produced

L = Labour units

C = Capital employed.

Assumptions upon which the production function with two variable inputs is based are as follows.

- (i) Two factors can be substituted for each other.
- (ii) No change in the technology used for the production process.

2.6 PRODUCTION ISO-QUANT

Q11. Define isoquant. Explain how isoquants are used to represent a production function with two variable inputs.

(OR)

What do you understand by iso-quants ?

Ans :

(Imp.)

Production Function Through Isoquant Curve

In the long run, as all factors are variable, the firm has a wider choice of adopting productive techniques and factor proportions, in relation to employed technology. Again, the basic characteristic of productive resources is that they are substitutable, though imperfectly, by another one to a certain extent. Thus, in a given production function, the variability of different factor inputs also implies their substitutability. In fact, one factor can be substituted for another in a particular manner; so that a constant level of output may be maintained. To elucidate the point, let us assume a production function with two variable inputs, say, labour (L), and capital (K); thus:

$$Q = F(L, K)$$

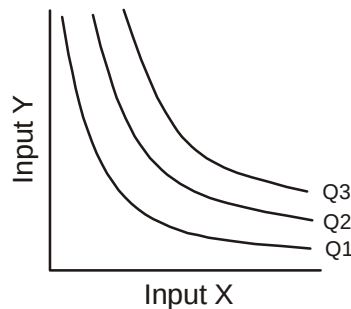
An ISO-quant derived from quantity and the Greek word ISO, meaning equal is a contour line drawn through the set of points at which the same quantity of output is produced while changing the quantities of two or more inputs. While an indifference curve mapping helps to solve the utility-maximizing problem of consumers, the Isoquant mapping deals with the cost-minimization problem of producers. Isoquants are typically drawn on capital-labor graphs, showing the technological trade off between capital and labor in the production function, and the decreasing marginal returns of both inputs. Adding one input while holding the other constant eventually leads to decreasing marginal output, and this is reflected in the shape of the isoquant.

A family of isoquants can be represented by an isoquant map, a graph combining a number of isoquants, each representing a different quantity of output.

Shapes of Iso-quants

If the two inputs are perfect substitutes, the resulting isoquant map generated is represented in fig. A; with a given level of production Q3, input X can be replaced by input Y at an unchanging rate. The perfect substitute inputs do not experience decreasing marginal rates of return when they are substituted for each other in the production function.

If the two inputs are perfect complements, the isoquant map takes the form of fig. B; with a level of production Q3, input X and input Y can only be combined efficiently in the certain ratio occurring at the kink in the isoquant. The firm will combine the two inputs in the required ratio to maximize profit.



Isoquants are typically combined with isocost lines in order to solve a costminimization problem for given level of output. In the typical case shown in the top figure, with smoothly curved isoquants, a firm with fixed unit costs of the inputs will have isocost curves that are linear and downward sloped; any point of tangency between an isoquant and an isocost curve represents the cost-minimizing input combination for producing the output level associated with that isoquant. A line joining tangency points of isoquants and iso-costs (with input prices held constant) is called the expansion path.

Q12. Describe the properties of iso-quant.

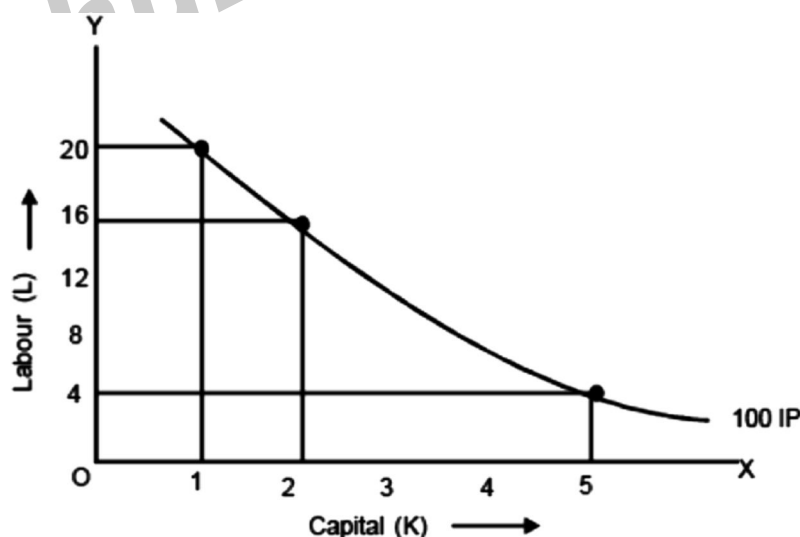
Ans :

The main properties of the isoquants are similar to those of indifference curves.

These properties are now discussed in brief:

(i) An Isoquant Slopes Downward from Left to Right

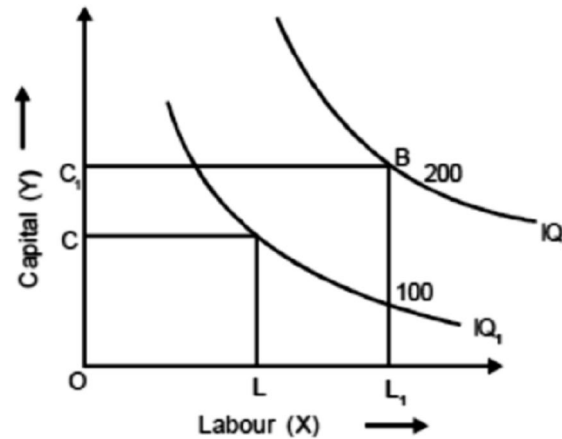
This implies that the Isoquant is a negatively sloped curve. This is because when the quantify of factor K (capital) is increased, the quantity of L (labor) must be reduced so as to keep the same level of output.



The fig. depicts that an isoquant IP is negatively sloped curve. This curve shows that as the amount of factor K is increased from one unit to 2 units, the units of factor L are decreased from 20 to 15 only so that output of 100 units remains constant.

(ii) An Isoquant that lays above and to the Right of another Represents a Higher Output Level

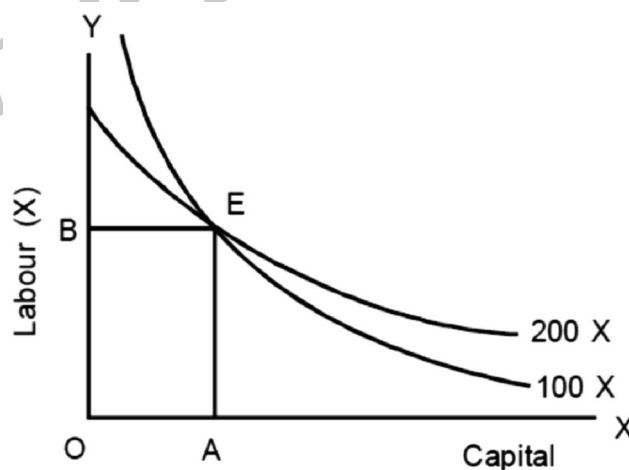
It means a higher isoquant represents higher level of output.



The fig. represents this property. It shows that greater output can be secured by increasing the quantity combinations of both the factors X and Y. The producer increases the output from 100 units to 200 units by increasing the quantity combination of both the X and Y. The combination of OC of capital and OL of labor yield 100 units of production. The production can be increased to 200 units by increasing the capital from OC to OC_1 and labor from OL to OL_1 .

(iii) Isoquants Cannot Cut Each Other

The two isoquants cannot intersect each other.

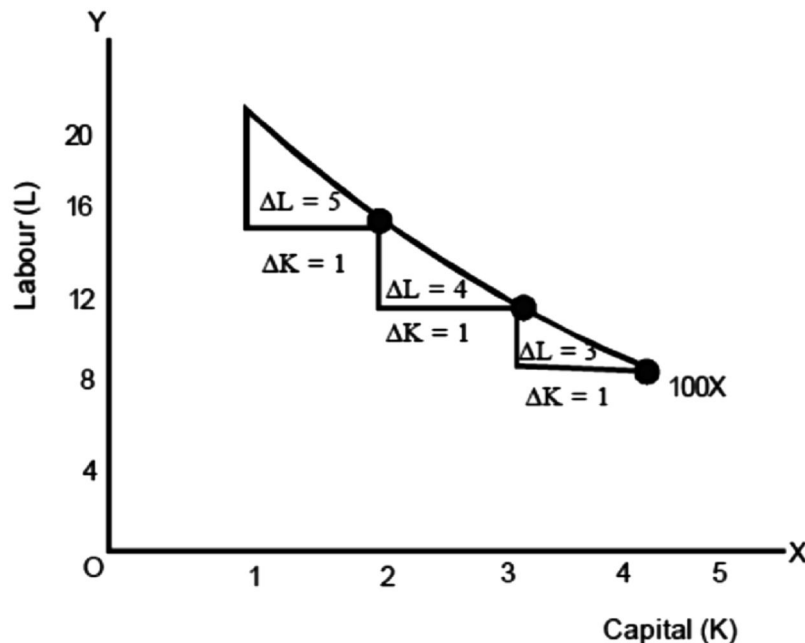


If two isoquant are drawn to intersect each other as is shown in this fig. then it is a negation of the property that higher Isoquant represents higher level of output to a lower Isoquant. The intersection at point E shows that the same factor combination can produce 100 units as well as 200 units. But this is quite absurd.

How can the same level of factor combination produce two different levels of output, when the technique of production remains unchanged. Hence two isoquants cannot intersect each other.

(iv) Isoquants are Convex to the Origin

This property implies that the marginal significance of one factor in terms of another factor diminishes along an ISO product curve. In other words, the isoquants are convex to the origin due to diminishing marginal rate of substitution.



In this fig. MRSKL diminishes from 5:1 to 4:1 and further to 3:1. This shows that as more and more units of capital (K) are employed to produce 100 units of the product, lesser and lesser units of labor (L) are used. Hence diminishing marginal rate of technical substitution is the reason for the convexity of an isoquant.

(v) Each Isoquant is Oval Shaped

The ISO product curve is elliptical. This means that the firm produces only those segments of the ISO-product curves which are convex to the origin and lie between the ridge lines. This is the economic region of production.

2.7 PRODUCTION ISO-COST

Q13. Define iso-cost curve.

(OR)

What do you understand by iso-cost ?

Ans :

(Imp.)

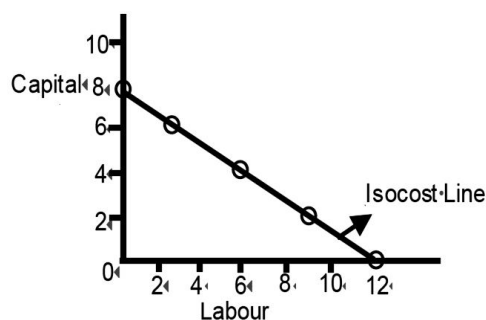
Meaning

An isocost line shows all combinations of inputs which cost the same total amount. Although similar to the budget constraint in consumer theory, the use of the isocost line pertains to cost-minimization in production, as opposed to utility-maximization.

The isocost line is an important component when analysing producer's behaviour. The isocost line illustrates all the possible combinations of two factors that can be used at given costs and for a given producer's budget. In simple words, an isocost line represents a combination of inputs which all cost the same amount.

Now suppose that a producer has a total budget of ₹ 120 and for producing a certain level of output, he has to spend this amount on 2 factors A and B. Price of factors A and B are ₹ 15 and ₹ 10 respectively.

Combinations	Units of Capital Price = ₹ 150	Units of Labour Price = ₹ 100	Total expenditure (in Rupees)
A	8	0	120
B	6	3	120
C	4	6	120
D	2	9	120
E	0	12	120



$$|\text{Slope}| = \frac{P_{\text{labour}}}{P_{\text{capital}}}$$

2.8 OPTIMAL EMPLOYMENT OF TWO INPUTS

Q14. Explain briefly about Optimal employment of two inputs.

(OR)

Explain how the optimal employment of a variable factor is achieved in short-run.

Ans :

(Imp.)

Variable techniques of production enables the producer to choose various capital-labour (k - L) combinations all of which yield the same output. Thus, simply by changing the proportion of factors 'k' and 'L', producer may be able to decrease total costs without affecting the total revenue and thus increases profits.

Whatever the firm wants to produce, producer needs to focus only on the achievement of economics of scale as its principal objective i.e., to produce high level of goods at considerably low cost objective. To achieve these optimal combinations factors of production is required which can be studied under,

- The production of given level of output at minimum cost (cost minimization).
- The production of maximum output with a given level of cost (profit maximization),

- (a) **Production of Given Level of Output at Minimum Cost:** This is a technique wherein a producer is able to produce a given (desired) level of output at a lowest possible cost. This can be explained with the help of an example, suppose a transportation company wants to satisfy the demand of its passengers and provides cargo services per year.

The company is having a wide combination of vehicles and workers for producing the desired level of output as depicted in the table. The annual cost of a vehicle and labour charges are found to be Rs. 1,50,000 and Rs. 4,000 respectively. The company has to optimally decide the combination that could yield the desired production at reduced cost.

Cost Data of Company A

Alternative Number	No. of Vehicles	No. of Workers	Total Cost
1	6	1500	69,00,000
2	7	1400	66,50,000
3	8	1320	64,80,000
4	9	1270	64,30,000
5	10	1240	64,60,000

Consider an alternative 2 where, an additional vehicle would cost Rs. 1,50,000, but the firm has a choice of reducing the number of workers from 1500 to 1400 (i.e., 100) which would save Rs. 4,00,000. Hence alternative '2' is found to be optimal than '1'. In the same manner, moving from combination 2 to 3 and then from combination 3 to 4 would result in some savings.

The firm would not move to alternative 5 as it doesn't result in cost reduction, the firm would save Rs. 1,20,000 in case of workers salaries but it has to incur Rs. 1,50,000 as vehicle expenses. Which is Rs. 30,000 more than alternative 4.

Graphical Representation

The above analysis can also be represented graphically, suppose if the firm selects y_1 as an output level as represented by an isoquant in the figure. Different isocost curves at different levels of expenditures can be used to show the price levels of capital and labour as $K_0 L_0$, $K_1 L_1$ and $K_2 L_2$.

In the figure, output level Y_1 is produced at least cost on the isocost curve $K_1 L_1$ and $K_2 L_2$. At any expenditure level below $K_1 L_1$ (eg : which is represented as $K_0 L_0$) it is not possible to produce the desired level of output.

The following combination of resources such as $K_0 L_0$ and $K_2 L_2$ are found to be suboptimal as they are incapable of producing the given level of output by keeping the cost at minimum level. Equilibrium point is represented by 'E' where the isoquant showing the desirable output is represented by tangent to the isocost.

The term tangency refers to the slope of the isoquant (i.e., marginal rate of technical substitution) which is equal to the slope of isocost line i.e., the ratio of inputs (price of labour, to capital) at any point of time.

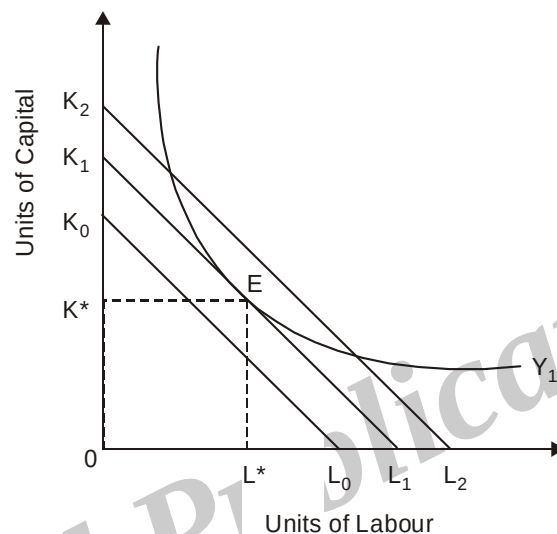
Thus, to minimize cost subject to a given level of output (at a given input prices), the firms must purchase those amounts of the 2 inputs which equalize the $MRTS_{LK}$ (Marginal Rate of Technical Substitution) of the inputs to their relative price (w/p)

Thus,

$MRTS_{L,K}$ = Ratio of marginal productivities

$$MRTS_{L,K} = \frac{w}{r} = \frac{MP_L}{MP_K} \text{ or}$$

$$\frac{MP_L}{w} = \frac{MP_K}{r}$$



Equilibrium point 'E' represents the optimal combination of inputs which minimizes the cost for the given level of output where L^* is used for labour and k^* for capital.

- (b) **Production of Maximum Output with a Given Level of Cost:** This alternative is used for deriving more benefit (output) from the existing level of expenditure. Such a situation is represented with the help of figure (2). At the available expected (budgeted) expenditure and the input prices, the firm gets an isocost curve KL.

The firm's desire to maximize the output, subjected to the given level of resources are represented by the isocost line KL. This can be achieved if the isoquant is tangent to the isocost line. In figure "(2).curve Y_3 is non-attainable. Whereas, F, output level couldn't be chosen as the higher level of output Y_2 can be achieved with the minimum level of cost.

At an equilibrium point 'E', OL^* of labour and OK^* capital are used to produce Y_2 output. Thus, in order to maximise output at a given level of cost, the firm first select those inputs that helps in equalizing the marginal rate of technical substitution and the input price ratio i.e.,

Alternative I

$$E = wL + rK.$$

2.9 EXPANSION PATH

Q15. Explain the determination of Expansion Path.

Ans :

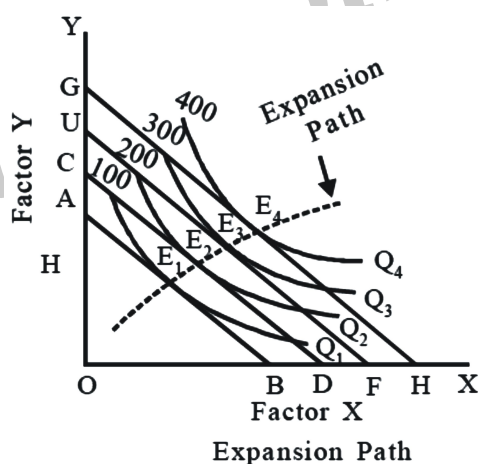
(Imp.)

A curve connecting the tangency points is called the expansion path because it shows how the input usages expand as the chosen level of output expands. In economics, an expansion path (also called a scale line) is a curve in a graph with quantities of two inputs, typically capital and labor, plotted on the axes.

The factor combination a firm will choose to produce a specified level of output, given the prices of the two factors. We are now interested to study how the entrepreneur will change his factor combination as he expands his output, given the factor prices. To begin with, suppose the prices of the two factors X and Y, are such that are represented by the slope of the isocost line AB.

The four iso-cost lines, AB, CD, UF, and -GH are drawn which show different levels of total cost or outlay. All iso-cost lines are parallel to one another indicating that prices of the two factors remain the same. If the firm wants to produce the output level denoted by Q1 (= 100 units of output), it will choose the factor combination E1 which minimises cost of production; E1 is the point of tangency between the equal product curve Q1 and the iso-cost line AB.

Now, if a firm wants to produce a higher level of output as denoted by the equal product curve Q2, then it will choose the factor combination E2 which is the leastcost combination for new output. Likewise, for still higher output levels as denoted by Q3 and Q4, the firm will respectively choose tangency combination E3 and E4 which minimise cost for the given outputs.



The line joining the minimum cost combinations such as E1, E2, E3, E4 is called the expansion path because it shows how the factor combination with which the firm produces will alter as the firm expands its level of output.

Thus the expansion path may be defined as the locus of the points of tangency between the isoquants and the iso-cost lines. The expansion path is also known as scale-line because it shows how the entrepreneur will change the quantities of the two factors when it increases the scale of production.

The expansion path can have different shapes and slopes depending upon the relative prices of the productive factors used and the shape of the isoquants (i.e., equal product curves). As we shall prove

below, when production function exhibits constant returns to scale, the expansion path will be a straight line through the origin. Further, for a given equal product map there will be different expansion paths for different relative prices of the factors.

Since expansion path represents the minimum-cost combinations for various levels of output, it shows the cheapest way of producing each level of output, given the relative prices of the factors. When two factors are variable; the entrepreneur will choose to produce at some point on the expansion path.

One cannot say exactly at which particular point on the expansion path the entrepreneur will in fact be producing unless one knows either the output which he wants to produce or the size of the cost or outlay it wants to incur. But this is certain that where both factors are variable and the prices of factors are given, a rational entrepreneur will seek to produce at one point or the other on the expansion path.

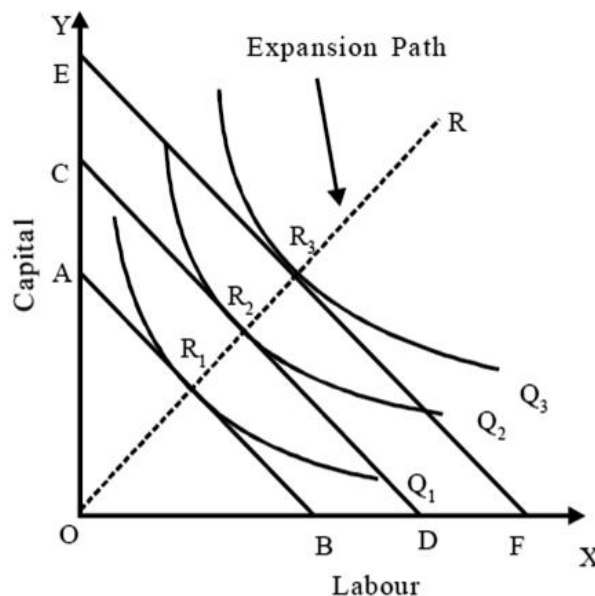
Q16. Explain expansion path of homogeneous production function.

Ans :

Whether expansion path is linear or non-linear depends on the nature of technology involved in the production function. An important property of a linear homogeneous production function is that its expansion path is straight line from the origin. As we saw above expansion path represents optimal factor combinations as firm expands its output, given the prices of factors. At an optimal factor combination, MRTSLK is equal to factor price ratio ($MRTSLK = w/r$).

Since the factor prices remain constant along an expansion path, this implies that MRTSLK will also remain constant.

Now, expansion path being a straight line from the origin implies that factor ratio (K/L) remains the same throughout on the expansion path. To prove that expansion path of a linear homogeneous production function is a straight line from the origin we take Cobb-Douglas production function ($Q = AK^{-1/2} L^{1/2}$) which is an important example of homogenous production function of the first degree.



Expansion path of a linear
homogeneous production function is
a straight line from the origin

Expansion path of linear homogeneous production function is a straight line from the origin.

Thus, MRTSLK in the given linear homogeneous Cobb-Douglas production function is equal to K/L . As explained above, at optimal factor combinations on the expansion path, MRTSLK equals w/r and, therefore, given the factor prices, MRTSLK remains constant along an expansion path. Thus K/L which is equal MRTSLK in a linear homogeneous Cobb-Douglas production will remain constant.

Constant factor ratio K/L along the expansion path implies that it is a straight line from the origin.

2.10 ECONOMIES OF SCOPE

Q17. Define and explain the concept of Economies of Scope.

Ans :

In business parlance, the concept of economies of scope is often used somewhat differently than the concept of economies of scale. It refers to the reduction in unit cost realized when the firm produces two or more products jointly rather than separately. That is to say, a multi-product firm often experiences economies of scope leading to the lowering of costs.

The degree of economies of scope can be measured in terms of the difference in the costs of production jointly and separately. The following formula is used to measure the degree of economies of scope.

$$DES = \frac{TC(A_n) + TC(B_n) - TC(A_n + B_n)}{TC(A_n + B_n)}$$

Where,

DES = Degree of economies of scope

$TC(A_n)$ = Total cost of producing A_n units of product A separately

$TC(B_n)$ = Total cost of producing B_n units of product B separately

$TC(A_n + B_n)$ = Total cost of producing products A and B jointly, i.e., producing A_n units product A and B_n units of product B together.

The economies of scope, has a close relationship with the economies of scale. A multi-product firm usually tends to have a scale of operation than a single product firm. So, the former reaps the benefits of the economies of scale. This may be attributed to the fact that a multi-product firm uses common infrastructure such as business office, factory plant, vehicles, managerial staff, etc. Furthermore, a multi-product firm can reap the economy of by-product under the economies of scope. For instance, a sugar factory can use its molasses - by product) for producing liquor by starting its own distillery units.

In practice, Motorola may be cited as a multi-product firm-producing two-way radios, cellular phones, pagers, semiconductors and other electronic gadgets-experiencing economies of scope and economies of scale to the limit.

PROBLEMS

1. Consider production function $Q = 5L^{0.5} K^{0.3}$. Does it represent increasing, decreasing or constant return to scale.

Sol :

Increasing both labour and capital inputs by m , we have

$$Q' = 5(mL)^{0.5} \cdot (mk)^{0.3}$$

$$Q' = m^{0.5} m^{0.3} \cdot 5 L^{0.5} k^{0.3}$$

$$Q' = m^{0.5} m^{0.3} \cdot 5 L^{0.5} k^{0.3}$$

$$Q' = m^{0.8} Q.$$

That is, by increasing labour and capital by m , output increase by $m^{0.8}$, that is, less than m , thus, in this case decreasing return to scale occurs.

2. Give the following MP_L function, a fixed capital stock of 64 units, wage rate of Rs. 10 and an output price of Rs. 5, determine the optimal combination of inputs $MP_L = 100 (K^{0.5}/L^{0.5})$.

Sol :

Capital (k) = 64 units

Wage rate (L) = 10

Output price = 5

$$\begin{aligned} MP_L &= 100 (k^{0.5}/L^{0.5}) \\ &= 100(64^{0.5}/10^{0.5}) \\ &= 100 (2^4 \times 0.5 / 10^{5/10}) \\ &= 100 (4/3.162) \\ MP_L &= 126.5. \end{aligned}$$

3. The following production function is given:

$$Q = 40 K^{0.5} L^{0.5}.$$

Find marginal product at labour and capital find out whether the firm is recurring increasing or decreasing or constant returns to scales.

Sol :

$$Q = 40 \cdot k^{0.5} \cdot L^{0.5}$$

Marginal Product at labour :

$$MP_L = \frac{\partial Q}{\partial L} = 40 \cdot k^{0.5} L^{-0.5} = 40 \left(\frac{k}{L} \right)^{0.5}$$

$$MP_K = \frac{\partial Q}{\partial k} = 40 \cdot L^{0.5} K^{-0.5} = 40 \left[\frac{L}{k} \right]^{0.5}$$

2.11 CONCEPTS OF COST**Q18. Define the term cost.**

Ans :

Cost refers to the expenditure of funds or use of property to acquire or produce a product or service. There are various types of cost such as average cost, fixed cost, historical cost, marginal cost, replacement cost, variable cost etc.

In business, cost is usually a monetary valuation of

1. Effort
2. Material
3. Resources,
4. Time and utilities consumed
5. Risks incurred, and
6. Opportunity

forgone in production and delivery of a good or service. All expenses are costs, but not all costs (such as those incurred in acquisition of an income-generating asset) are expenses.

Q19. Explain different types of costs.

Ans :

The different types of costs are :

(i) Real Cost

The term "real cost of production" refers to the physical quantities of various factors used in producing a commodity. For example, real cost of a table is composed of a carpenter's labour, two cubic feet of wood, a dozen of nails, half a bottle of varnish paint, depreciation of carpenter's tools etc., which go into the making of the table. Real cost, thus, signifies the aggregate of real productive resources absorbed in the production of a commodity or service.

The real cost of production of a commodity refers to the exertion of labour, sacrifice involved in the abstinence from present consumption by the savers to supply capital, and social effects of pollution, congestion, and environmental distortions.

In a much philosophical way, Marshall (1920), describes "real cost" as follows: "The production of a commodity generally requires many different kinds of labour and the use of capital in many forms. The exertions of all the different kinds of labour that are directly or indirectly involved in making it together with the abstinences or rather the waiting required for saving the capital used in making it all these efforts and sacrifices together will be called the real cost of production of commodity."

According to Marshall, thus, the real cost of production signifies toils, troubles, sacrifice on account of loss of consumption for savings, social effects of pollution caused by factory smoke, automobiles, etc. Evidently, the concept of real cost is an abstract idea. Its exact measurement is not possible.

(ii) Opportunity Cost

The concept of opportunity cost is based on the scarcity and versatility characteristics of productive resources. It is the most fundamental concept in economics.

It is a known economic fact that our wants are multiple, while our resources are scarce but capable of alternative uses. So the problem of choice is involved. We have to choose the use of a given resource for a particular purpose out of its alternative applicability. When we choose the resource in one use to have one commodity for satisfying a particular want, it is obvious that its other use as some other commodity that can be produced by it cannot be available simultaneously.

This means, the second alternative use of the resources is to be sacrificed to have the resource employed in one particular way, i.e., to get a particular commodity because the same resource cannot be employed in two ways at the same time. Apparently, the employment of factors in producing a commodity always involves the loss of opportunity of production of some other commodity. The sacrifice or loss of alternative use of a given resource is termed as "opportunity cost." Thus, the opportunity cost is measured in terms of the forgone benefits from the next best alternative use of a given resource. In other words, the opportunity cost of producing a certain commodity is the value of the other commodity that the resources used in its production could have produced instead. It should be noted that opportunity cost of anything is just the next best alternative forgone in the use of productive resources and not all alternative possible uses.

Importance

The concept of opportunity cost has a great economic significance.

- (a) Helps to determine of relative prices of goods: The concept of opportunity cost is useful in explaining the determination of relative prices of different goods. For instance, if the same group of factors can produce either one car or six scooters, then the price of one car will tend to be at least six times more than that of one scooter.
- (b) Assists to determine of normal remuneration to a factor: The opportunity cost sets the value of a productive factor for its best alternative use. It implies that if a productive factor is to be retained in its next best alternative use, it must be compensated for or paid at least what it can earn from its next best alternative use. For instance, if a college Professor can get an alternative employment in a bank as an officer at a salary of Rs. 20,000 per month, the college has to pay at least Rs. 20,000 salary to retain him in the college.
- (c) Support for decision making and efficient resource allocation: The concept of opportunity cost is essential in rational decision making by the producer. This can be explained with the help of an example. Suppose, a producer in the automobile industry has to decide as to whether he should produce motor cars or scooters out of his given resources. He can arrive at a rational decision by measuring the opportunity costs of producing cars and scooters and making a comparison with the prevailing market prices of these goods. The concept of opportunity cost serves as a useful economic tool in analyzing optimum resource allocation and rational decision making.

(iii) Incremental cost

Incremental cost is the overall change that a company experiences by producing one additional unit of goods. Incremental cost is the composition of total cost from the surrogate of contributions, where any increment is determined by the contribution of the cost. If the good being produced is infinitely divisible, so the size of a marginal cost will change with volume, as a non-linear and non-proportional cost function includes the following:

- (i) Variable terms dependent to volume,
- (ii) Constant terms independent to volume and occurring with the respective lot size,
- (iii) Jump fix cost increase or decrease dependent to steps of volume increase.
- (iv) Money Cost

Cost of production measured in terms of money is called the money cost. Money cost is the monetary expenditure on inputs of various kinds' raw materials, labour, etc., required for the output. It is the money spent on purchasing the different units of factors of production needed for producing a commodity. Money cost is obviously the payment made for the factors in terms of money. Money cost is the outlay cost, i.e., actual financial expenditure of the firm.

The following items of a firm's expenditure are explicit money costs:

- (i) Costs of raw materials;
- (ii) Wages and salaries;
- (iii) Power charges;
- (iv) Rent of business or factory premises;
- (v) Interest payments of capital invested;
- (vi) Insurance premiums;
- (vii) Taxes like property tax, duties, license fees etc.
- (viii) Miscellaneous business expenses like marketing and advertising expenses, transport cost, etc.

(v) **Implicit costs**

Implicit costs are the opportunity costs of the use of factors which a firm does not buy or hire but already owns. Implicit costs are not directly incurred by the firm through market transactions, but nevertheless are to be reckoned in the measurement of total money costs of production. These are to be imputed or estimated on the bases of the opportunity costs, i.e., from what the factors owned by the firm itself could earn in their next best alternative employment.

Implicit money costs are imputed payment which is not directly or actually paid out by the firm as no contractual disbursement is fixed for them. Such implicit money costs arise when the firm or entrepreneur supplies certain factors owned by himself. For instance, the entrepreneur may have his own land in production, for which no rent is to be paid in the actual sense. But this, however, is to be reckoned as a cost, assuming that if the entrepreneur had rented this land to somebody, he would have definitely earned some rent. Hence, such rent is to be imputed and regarded as implicit money cost.

Implicit costs are as follows:

- (i) Wages of labour rendered by the entrepreneur himself.
- (ii) Interest on capital supplied by him.
- (iii) Rent of land and premises belonging to the entrepreneur himself and used in his production.
- (iv) Normal returns (profits) of entrepreneur, compensation needed for his management and organizational activity.

(vi) **Explicit Cost**

An explicit cost is a direct payment made to others in the course of running a business, such as wage, rent and materials, as opposed to implicit costs, which are those where no actual payment is made. It is possible still to underestimate these costs, however: for example, pension contributions and other "perks" must be taken into account when considering the cost of labour. Explicit costs are taken into account along with implicit ones when considering economic profit. Accounting profit only takes explicit costs into account.

(vii) Economic Costs

In economics, the cost of production consists of remuneration to all the factors of production, viz., wages to labour, rent to land, interest to capital and normal profits to the entrepreneur. The economic cost of a decision depends on both the cost of the alternative chosen and the benefit that the best alternative would have provided if chosen. Economic cost differs from accounting cost because it includes opportunity cost.

Example: Consider the economic cost of attending college. The accounting cost of attending college includes tuition, room and board, books, food, and other incidental expenditures while there. The opportunity cost of college also includes the salary or wage that otherwise could be earning during the period. So for the two to four years an individual spends in school, the opportunity cost includes the money that one could have been making at the best possible job. The economic cost of college is the accounting cost plus the opportunity cost.

(viii) Accounting Costs

An accountant, cost would include in the cost of production only the cash payments to the factors of production, made by the entrepreneur, for the services rendered by these factors in the productive process. These cash payments are called the explicit costs. Thus, an accountant will include only explicit costs in his cost calculations. Thus, the accountant's concept of cost includes wage, interest and rent payment but not the profits made by the entrepreneur because no entrepreneur even makes cash payment to himself. In common practice also, we do not tend to regard profits as part of a firm's cost of production. But in economic theory, however, normal profits form a part of business firm's cost of production.

2.11.1 Cost Function**Q20. Define cost function. Explain the importance of Cost Function.**

Ans :

Meaning

The cost function is a function of input prices and output quantity. Its value is the cost of making that output given those input prices. A common form: $c(w_1, w_2, y)$ is the cost of making output quantity y using inputs that cost w_1 and w_2 per unit. The relationship between output and costs is expressed in terms of cost function.

By incorporating prices of inputs into the production function, one obtains the cost function since cost function is derived from production function. However, the nature of cost function depends on the time horizon. In microeconomic theory, we deal with short run and long run time.

A cost function may be written as:

$$C_q = f(Q_i, P_i)$$

Where C_q is the total production cost,

Q_i is the quantities of inputs employed by the firm, and

P_i is the prices of relevant inputs. This cost equation says that cost of production depends on prices of inputs and quantities of inputs used by the firm.

Importance

- The study of business behaviour concentrates on the production process the conversion of inputs into outputs and the relationship between output and costs of production.
- The production function is just a starting point for the supply decisions of a firm. For any business decision, cost considerations play a great role.

Cost function is a derived function. It is derived from the production function which captures the technology of a firm. The theory of cost is a concern of managerial economics. Cost analysis helps allocation of resources among various alternatives. In fact, knowledge of cost theory is essential for making decisions relating to price and output.

Whether production of a new product is a wiser one on the part of a firm greatly depends on the evaluation of costs associated with it and the possibility of earning revenue from it. Decisions on capital investment (e.g., new machines) are made by comparing the rate of return from such investment with the opportunity cost of the funds used.

The relevance of cost analysis in decision-making is usually couched in terms of short and long periods of time by economists. In all market structures, short run costs are crucial in the determination of price and output. This is due to the fact that the basis for cost function is production and the prices of inputs that a firm pays.

On the other hand, long run cost analysis is used for planning the optimal scale of plant size. In other words, long run cost functions provide useful information for planning the growth as well as the investment policies of a firm. Growth of a firm largely depends on cost considerations.

The position of the U-shaped long run AC of a firm is suggestive of the direction of the growth of a firm. That is to say, a firm can take a decision whether to build up a new plant or to look for diversification in other markets by studying its existence on the long run AC curve. Further, it is the cost that decides the merger and takeover of a sick firm.

Non-profit sector or the government sector must also have knowledge of cost function for decision-making. Whether the Narmada Dam is to be built or not, it should evaluate the costs and benefits 'flowing' from the dam.

2.11.2 Short Run Cost Functions

Q21. Explain Cost-Output Relationship in the Short-Run.

(OR)

Describe the various short run cost functions.

Ans :

(Imp.)

Short run is a period of time over which at least one factor must remain fixed. For most of the firms the fixed resource or factors which cannot be increased to meet the rising demand of the good is capital i.e., plant and machinery.

Short run is a period of time over which output can be changed by adjusting the quantities of resources such as labour, raw material, fuel but the size or scale of the firm remains fixed.

The total cost of a firm in the short run is divided into two categories

1. Fixed cost and
2. Variable cost

The two types of economic costs are now discussed in brief.

Short run costs of a firm are now explained with the help of a schedule and diagrams.

Output	TFC	TVC	TC	AFC	AVC	AC	MC
0	1000	0	1000	0	0	0	0
1	1000	60	1060	1000	60	1060	60
2	1000	100	1100	500	50	550	40
3	1000	150	1150	333.33	50	383.33	50
4	1000	200	1200	250	50	300	50
5	1000	400	1400	200	80	280	200
6	1000	700	1700	166.67	116.67	283.34	300
7	1000	1100	2100	142.86	157.14	300	400

The short run cost data of the firm shows that total fixed cost TFC remains constant at Rs.1000/- regardless of the level of output.

1. Total Cost (TC)

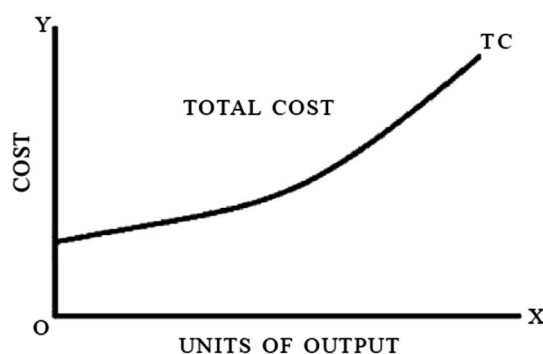
Total cost is the aggregate of expenditures incurred by the firm in producing a given level of output. Total cost is measured in relation to the production function by multiplying factor prices with their quantities.

If the production functions is: $Q = f(a, b, c, \dots, n)$, then total cost is $TC = f(Q)$ which means total cost varies with output.

For measuring the total cost of a given level of output, thus, we have to aggregate the product of factor quantities multiplied by their respective prices. Conceptually, total cost includes all kinds of money costs, explicit as well as implicit. Thus, normal profit is also included in total cost. Normal profit is an implicit cost, it is a normal reward made to the entrepreneur for his organizational services. It is just a minimum payment essential to retain the entrepreneur in a given line of production. If this normal return is not realized by the entrepreneur in the long run, he will stop his present business and will shift his resources to some other industry. Thus, total cost may be viewed as the sum of total fixed cost and total variable cost at each level of output.

$$TC = TFC + TVC$$

Total Cost Curve/Diagram



In the above figure, total cost curve which is the sum of the total fixed cost and variable cost at various levels of output has nearly the same shape. The difference between the two is by only a fixed amount of Rs.1,000. The total variable cost curve and the total cost curve begin to rise more rapidly as production is increased.

The reason for this is that after a certain output, the business has passed its most efficient use of its fixed costs machinery, building etc., and its diminishing return begins to set in. Behaviour of Total Costs

- (i) TFC remains constant at all levels of output. It is the same even when the output is nil. Fixed costs are thus independent of output.
- (ii) TVC varies with the output. It is nil when there is no output. Variable costs are, thus, direct costs of the output.
- (iii) TVC does not change in the same proportion. Initially, it is increasing at a decreasing rate, but after a point, it increases at an increasing rate. This is due to the operation of the law of variable proportions or non-proportional output, which suggests that initially to obtain a given amount of output relatively, variations in factors are needed in less proportion, but after a point when the diminishing phase operates, variable factors, are to be employed in a greater proportion to increase the same 'level' of output.
- (iv) TC varies in the same proportion as the TVC. Thus, in the short period, the changes in total cost are entirely due to changes in the total variable costs, as fixed costs, the other component of total costs, remain constant.

2. Total Fixed Cost (TFC)

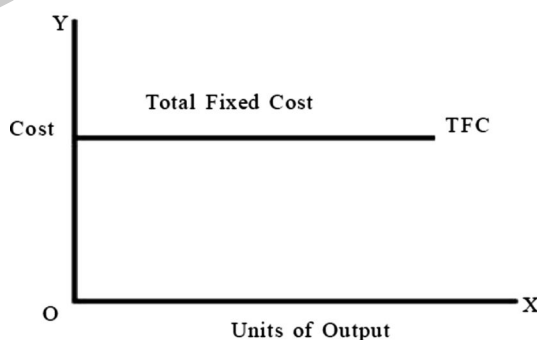
Total fixed cost corresponds to fixed inputs in the short run production function. It is obtained by summing up the product of quantities of the fixed factors multiplied by their respective unit prices. TFC remains the same at all levels of output in the short run.

$$\boxed{\text{TFC} = \text{TC} - \text{TVC} \text{ (or) } \text{AFC} \times Q}$$

Suppose a small furniture shop proprietor starts his business by hiring a shop at a monthly rent of ₹ 1,000 borrowing ₹ 50,000 from a bank at an interest rate of 10% and buys capital equipment worth ₹ 2,000. Then his monthly total fixed cost is estimated to be:

$$1,000 + 2,000 + 500 = 3,500$$

Total Fixed Cost Curve/Diagram:

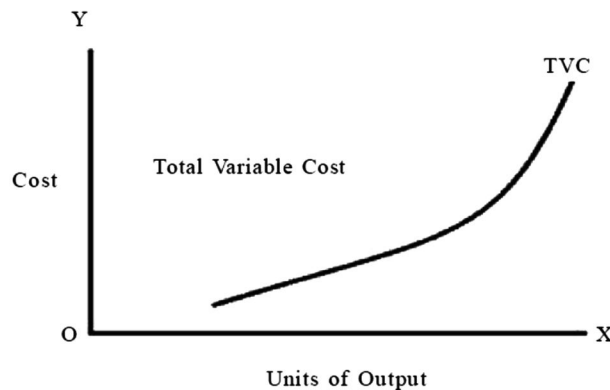


In this diagram, the total fixed cost of a firm is assumed to be Rs.1000 at various levels of output. It remains the same even if the firm's output is zero.

3. Total Variable Cost (TVC)

Corresponding to variable inputs in the short-run production is the total variable cost. It is obtained by summing up the product of quantities of input multiplied by their prices. Again, $\text{TVC} = F(Q)$ which means, total variable cost is an increasing function of output.

$$\text{TVC} = \text{TC} - \text{TFC} \text{ or } \text{AVC} \times Q$$

Total Variable Cost Curve/Diagram:

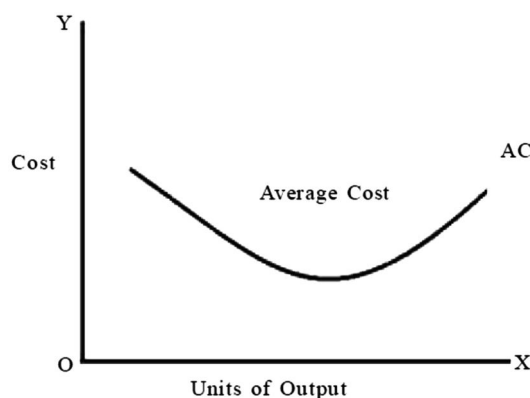
In the diagram, the total variable cost curve (TVC) increases with the higher level of output. It starts from the origin. This increases at a diminishing rate up to the 4th units of output. It then begins to rise at an increasing rate.

4. Average Cost (AC) or Average Total Cost (ATC)

Average cost is total cost divided by total units of output. Hence, average total cost can be computed simply by adding average fixed cost and average variable cost at each level of output. Average cost is per unit cost i. e. money spending to produce a unit of total output.

$$AC = AFC + AVC \text{ (or) } TC / Q$$

Average cost is distinct from the price, and depends on the interaction with demand through elasticity of demand and elasticity of supply. In cases of perfect competition, price may be lower than average cost due to marginal cost pricing. Short-run average cost will vary in relation to the quantity produced unless fixed costs are zero and variable costs constant. A cost curve can be plotted, with cost on the y-axis and quantity on the x-axis. Marginal costs are often shown on these graphs, with marginal cost representing the cost of the last unit produced at each point; marginal costs are the first derivative of total or variable costs.



A typical average cost curve will have a U-shape, because fixed costs are all incurred before any production takes place and marginal costs are typically increasing, because of diminishing marginal productivity. In this "typical" case, for low levels of production marginal costs are below average costs, so average costs are decreasing as quantity increases. An increasing marginal cost curve will intersect a U-shaped average cost curve at its minimum, after which point the average cost curve begins to slope

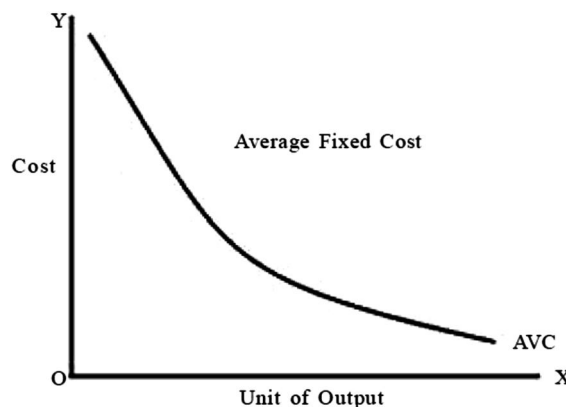
upward. For further increases in production beyond this minimum, marginal cost is above average costs, so average costs are increasing as quantity increases. An example of this typical case would be a factory designed to produce a specific quantity of widgets per period: below a certain production level, average cost is higher due to under-utilized equipment, while above that level, production bottlenecks increase the average cost.

5. Average Fixed Cost (AFC)

Average fixed cost is total fixed cost divided by total units of output. Thus, average fixed costs are the fixed cost per unit of output.

$$\text{AFC} = \text{AC} - \text{AVC} \text{ (or) } \text{TFC} / Q$$

Average Fixed Cost is the fixed cost per unit of output.

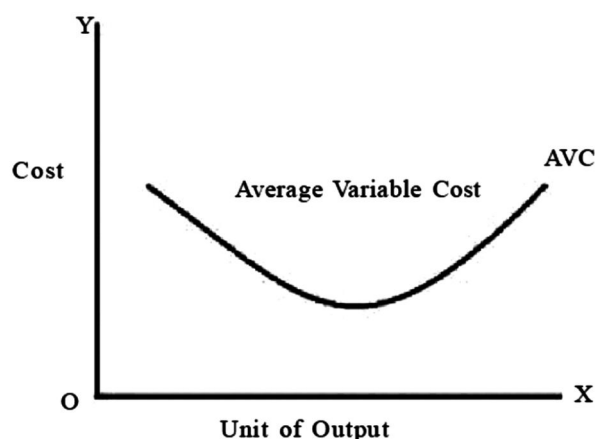


It is a negative sloping curve which goes very close of X axis but it will never touch X axis i.e. AFC will never become zero because TFC is a positive amount.

6. Average Variable Cost (AVC)

Average variable cost is total variable cost divided by total units of output. Thus, average variable cost is variable cost per unit of output.

$$\text{AVC} = \text{AC} - \text{AFC} \text{ (or) } \text{TVC} / Q$$



AVC curve is a U shaped curve. AVC curve will come down in the beginning and then rises as more units of output are produced with a given plant. When the producer adds more units of variable factors in a fixed plant, the efficiency of inputs first increases and then it decreases.

2.11.3 Finding Minimum Average Variable Cost Through Equations

Q22. What is average variable cost? Explain its equation.

Ans :

Meaning

The average variable cost (AVC) is the total variable cost per unit of output. This is found by dividing total variable cost (TVC) by total output (Q). Total variable cost (TVC) is all the costs that vary with output, such as materials and labor. The easiest way to determine if a cost is variable is if the output changes, the cost changes as well.

Profit-maximizing firms will use the AVC to determine at what point they should shut down production in the short run. If the price they are receiving for the good is more than the AVC given the output they are producing, then they are at least covering all variable costs and some fixed costs. Fixed costs are those costs incurred that do not vary with production; they are fixed at a certain price no matter how much is produced. The best example is rent on the space used to produce the good or provide the service. It doesn't matter how many units you produce or customers you serve, the rent will always remain the same. Therefore even if you are producing zero, as would be the case if you shut down production, you will still have to pay the fixed costs.

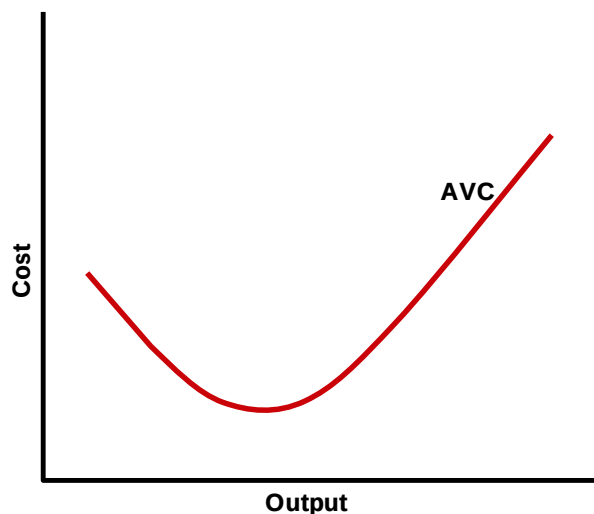
As long as price is above the AVC and covering some of the fixed costs, you are better off continuing production. If the price falls below the AVC, then the firm may decide to shut down production in the short run because the price is no longer covering any portion of the fixed costs or all of the variable costs. Therefore the firm would rather not incur any variable costs and just pay the fixed costs.

AVC Function and Equation

This chart below shows the average variable cost function. It's a U-shaped curve. Initially, the variable cost per unit of output decreases as output increases. At one point, it reaches a low. After the low, the variable cost per unit of output starts to increase. The increase in AVC after a certain point is indirectly related to the law of diminishing marginal returns. The law states that at some point, the additional cost incurred to produce one more unit is greater than the additional revenue (or returns) received. At that point, the AVC starts to increase.

Average Variable Cost Function

The average variable cost (AVC) can be determined with the following equation:



$$AVC = TVC / Q$$

Where AVC is the average variable cost

TVC is the total variable cost

Q is the Quantity.

Q23. Explain relationship between average variable cost and average product.

Ans :

Average variable cost bears an important relationship with the average product per unit of the variable factor. Let Q stand for quantity of total product produced; L for the amount of the variable factor, say labour, used and w for the price per unit of the variable factor and AP for the average product of the variable factor. We assume that the price of the variable factor remains unaltered as more or fewer Units of the variable factor are employed.

$$\text{Total product (or output } Q) = AP \times L$$

where AP stands for average product of labour, the variable factor and L for the amount of labour used.

$$\text{Average variable cost (AVC)} = \frac{TVC}{Q}$$

Since the total variable cost (TVC) is equal to the amount of the variable factor (L) employed multiplied by the price per unit (w) of the variable factor, (TVC = L.w.). Therefore,

$$AVC = \frac{L.w}{Q}$$

$$\text{Since } Q = AP \times L$$

$$\therefore AVC = \frac{L.w}{AP \times L} = \frac{w}{AP} = w \left(\frac{1}{AP} \right)$$

Thus, given the price of the variable factor w, the average variable cost is equal to the reciprocal of the average product $\left(\frac{1}{AP} \right)$ is the reciprocal of AP multiplied by a constant w. It follows that average cost and average product vary inversely with each other. Therefore, when average product rises in the beginning as more units of the variable factor are employed, the average variable cost must be falling. And when the average product of the variable factor falls, the average variable cost must be rising. At the level of output at which the average product is maximum, the average variable cost is minimum. Thus the average variable cost (AVC) curve looks like the average product (AP) curve turned upside down with minimum point of the AVC curve corresponding to the maximum point of the AP curve.

2.11.4 Long Run Cost Function

Q24. Explain Cost-Output Relationship in the Long-Run.

(OR)

Explain in detail the long run cost functions with diagram.

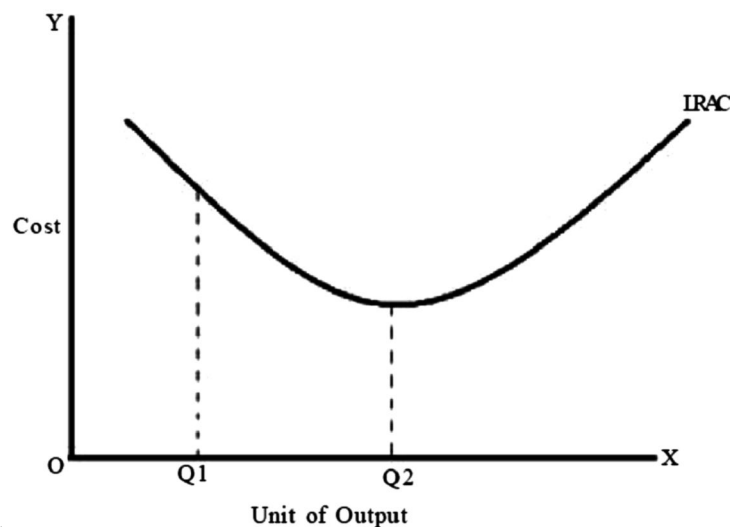
Ans :

(Imp.)

The long run refers to a time period during which full adjustment to a change in environment can be made by the firm by varying all inputs, including capital equipment & factory building.

Long-run Average Cost curve (LAC)

The long-run average cost curve depicts the cost per unit of output in the long run that is, when all productive inputs' usage levels can be varied. All points on the line represent least-cost factor combinations; points above the line are attainable but unwise, while points below are unattainable given present factors of production. The behavioral assumption underlying the curve is that the producer will select the combination of inputs that will produce a given output at the lowest possible cost. Given that LRAC is an average quantity, one must not confuse it with the long-run marginal cost curve, which is the cost of one more unit. The LRAC curve is created as an envelope of an infinite number of short-run average total cost curves, each based on a particular fixed level of capital usage. The typical LRAC curve is U-shaped, reflecting increasing returns of scale where negatively-sloped, constant returns to scale where horizontal and decreasing returns where positively sloped. The envelope is not created by the minimum point of each short-run average cost curve.



In a long-run perfectly competitive environment, the equilibrium level of output corresponds to the minimum efficient scale, marked as Q_2 in the diagram. This is due to the zero-profit requirement of a perfectly competitive equilibrium. This result, which implies production is at a level corresponding to the lowest possible average cost. All points along the LRAC are productively efficient, by definition, but not all are equilibrium points in a long-run perfectly competitive environment. In some industries, the bottom of the LRAC curve is large in comparison to market size.

This means that the largest firm tends to have a cost advantage, and the industry tends naturally to become a monopoly, and hence is called a natural monopoly.

Natural monopolies tend to exist in industries with high capital costs in relation to variable costs, such as water supply and electricity supply.

Features

Following are the main features of the LAC curve:

1. Tangent Curve

By joining the loci of various plant curves relating to different operational short run phases, the LAC curve is drawn as a tangent curve. The LAC approximates a smooth curve, if the plant sizes can be varied by infinitely small capacities and there are numerous short run average cost curves to each of which the MC is a tangent. In other words, the long run average cost curve is the locus of all these points of tangency.

2. Envelope Curve

The LAC curve is also referred to as the 'envelope curve', because it is the envelope of a group of short run average cost curves appropriate to different levels of output. The LAC curve is enveloping or tangential to a number of plant sizes and the related SACs. This is a much simplified assumption. Normally, however, the firm may come across with a choice among a large variety of plants.

3. Planning Curve

LAC curve is regarded as the long run planning device, as it denotes the least unit cost of producing each possible level output and the size of the plant in relation to the LAC curve. A rational entrepreneur would select the optimum scale of plant. The optimum scale of plant is that plant size at which a SAC is tangent to the LAC, such that both the curves have the minimum point of tangency.

4. Minimum cost combinations

Since LAC is derived as the tangent to various SAC curves under consideration, the cost levels be presented by the LAC curve for different levels of output reflect minimum cost combinations of resource inputs to be adopted by the firm at each long run level of output.

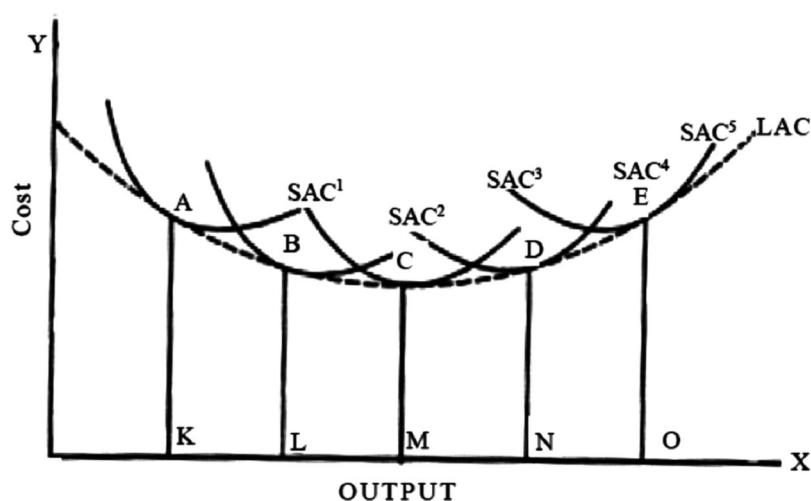
5. Flatter U-shaped

LAC curve is less U-shaped or rather dish-shaped. This means that in the beginning it gradually slopes downwards and then, after reaching a certain point, it gradually begins to slope upwards. This implies that in the long run when the firm adopts a larger scale of output, its long run average cost in the beginning tends to decrease. At a certain point, it remains constant, and then rises. This behaviour of long run average costs is attributed to the operation of laws of returns to scale. Increasing returns in the beginning cause decreasing costs, constant returns, constant costs, and then decreasing returns, increasing costs.

Q25. Explain the relationship between LAC and SAC.

Ans :

In the long run, all costs of a firm are variable. The factors of production can be used in varying proportions to deal with an increased output. The firm having time- period long enough can build larger scale or type of plant to produce the anticipated output. The shape of the long run average cost curve is also U-shaped but is flatter than the short run curve as is illustrated in the following diagram:



In the diagram given above, there are five alternative scales of plant SAC1, SAC2, SAC3, SAC4 and, SAC5. In the long run, the firm will operate the scale of plant which is most profitable to it. If the anticipated output rate is 1000 per unit of time the firm would build the scale of plant given by SAC5 and operate it at point E. If we draw a tangent to each of the short run cost curves, we get the long average cost (LAC) curve. The LAC is U-shaped but is flatter than the short run cost curves. Mathematically expressed, the long-run average cost curve is the envelope of the SAC curves.

1. Average Fixed Cost Curve (AFC Curve)

As the output increases, the total fixed costs get spread over a larger and larger output and therefore, the average fixed cost goes on progressively declining. Consequently, the average fixed curve slopes downwards from the left to the right throughout its entire stretch. In mathematical terms, AFC curve approaches both the axes asymptotically, i.e., it gets very close to but never touches either axis.

2. Average Variable Cost Curve (AVC Curve)

The average variable cost generally declines in the initial stages as the firm expands and approaches the optimum level of output. After the plant capacity output is reached, the average variable cost begins to rise sharply. Thus, usually, the average variable cost curve declines initially, reaches the minimum and then goes on rising. The AVC curve is, thus, slightly U-shaped, indicating that as the output increases initially, the average variable cost is decreasing, and then it remains constant for a while and again starts increasing.

There are, thus, three phases of AVC curve:

- (i) Decreasing phase,
- (ii) Constant phase and
- (iii) Increasing phase.

These stages in the AVC curves correspond to the stages of increasing, constant and decreasing average product (returns to the variable factors) underlying the law of variable proportions.

3. Average Total Cost Curve (ATC Curve)

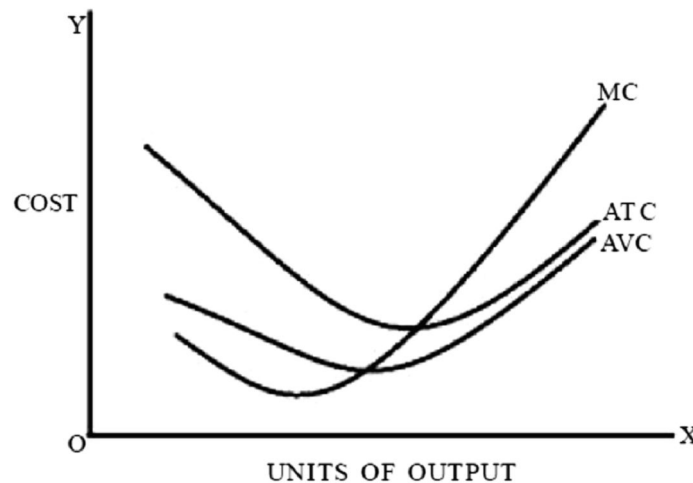
Since the average total cost is the sum of average fixed and average variable costs, the ATC curve is also a vertical summation of the AFC and AVC curves. Hence, the curve ATC is derived by the superimposition of the AVC curve over the AFC curve. As such, the ATC curve is U-shaped, indicating that if the output of the firm is increased, initially the average total cost decreases up to a point, then it remains constant for a while and thereafter it starts rising.

4. Explanation of the U-Shape of ATC Curve

The reasons why the ATC curve is U-shaped are not far to seek. Since, $ATC = AFC + AVC$, it follows that the behaviour of the ATC curve is determined by the AVC curve and AFC curve. The ATC curve is a rectangular hyperbola, which implies that the average fixed cost diminishes continuously as output expands. In the initial stage, the AVC curve also slopes downward. As such, in the beginning the ATC curve tends to fall when output expands. At a certain point, however, the AVC starts rising, so the AVC curve has a positive slope, yet the ATC curve continues to fall. This is due to the predominant influence of the falling AFC curve.

Since the falling effect of AFC curve is stronger than the rising effect of AVC curve at this stage, the net effect causes ATC to fall. But, as the output expands further to a higher level, the AVC curve tends to rise sharply due to the operation of the law of diminishing returns. Now, the rising effect of AVC being predominant, it more than discounts the falling effect of AFC curve, so the net effect is that the ATC starts

rising. Indeed, at the point where that rise of AVC exactly nullifies the fall of AFC, the balancing effect causes ATC to remain constant first and then when the rising effect of AVC becomes more pronounced the ATC starts rising. As such, the overall ATC curve assumes U-shape. The falling path of ATC is largely due to the falling AFC curve, while its rising path is largely influenced by the rising AVC curve.



This is how the ATC curve assumes U-shape in the short run period. Again, as we have already seen, the ATC curve is the reciprocal of the AP curve. The AP curve is formed by the operation of the law of diminishing returns in the short run. The occurrence of non-proportional output is basically due to the indivisibility of fixed factors and imperfect substitutability between fixed and variable factors.

PROBLEMS

4. Following is the short run total cost function

$$TC = 100 + 50Q - 12Q^2 + Q^3$$

Determine total variable cost function average variable cost function and marginal cost function. Calculate total cost, ATC, AVC and MC when firm produced 10 units of output.

Sol :

$$TC = 100 + 50Q - 12Q^2 + Q^3$$

$$TC = 100 + 50(10) - 12(10)^2 + (10)^3$$

$$= 100 + 500 - 1200 + 1000$$

$$TC = ₹ 400$$

$$\text{Average cost} = \frac{TC}{Q} = \frac{100}{10} + \frac{50(10)}{10}$$

$$- \frac{12(10)^2}{10} + \frac{(10)^3}{10}$$

$$= 10 + 50 - 120 + 100$$

$$\text{Average cost} = ₹ 40$$

$$\begin{aligned}
 \text{Marginal cost} &= \frac{dTVC}{dQ} \\
 &= a + 2bQ + 3CQ^2 + 4dQ^3 \\
 &= 100 + 2(50)(10) - 3(12)(10)^2 + 4(10)^3 \\
 &= 100 + 1000 - 3600 + 4000 \\
 MC &= ₹1500
 \end{aligned}$$

5. Given the following TR and TC function

$$TR = 50Q$$

$$TC = 10000 + 30Q$$

Determine the break-even rate of output. Determine the output rate necessary to earn profit of Rs. 20,000.

Sol :

$$TR = 50Q$$

$$TC = 10,000 + 30Q$$

$$TR = TC$$

$$PQ_B = TFC + AVC \cdot Q_B$$

$$PQ_B - AVCQ_B = TFC$$

$$(P - AVC) Q_B = TFC$$

$$Q_B = \frac{TFC}{P - AVC}$$

$$P = 50$$

$$TFC = 10,000$$

$$AVC = 30$$

$$Q_B = \frac{10,000}{50 - 30}$$

$$= \frac{10,000}{20} = 500 \text{ units}$$

To earn a profit of ₹20,000

$$\text{Desired output} = \frac{TFC + \pi}{P - AVC}$$

$$= \frac{10,000 + 20,000}{50 - 30} = \frac{30,000}{20}$$

$$\text{Desired output} = 1500 \text{ units}$$

From the above, it can be concluded that if he is able to sell 1500 units, he will recover the fixed and variable cost and also makes a profit of ₹20,000.

6. The short run cost functions of a firm is

$$TC = 120 + 6Q + 2Q^2$$

Where TC = Total cost, Q = Quantity of output

Find the rate of output that results in minimum average variable cost.

Sol :

$$TC = 120 + 6Q + 2Q^2$$

$$\begin{aligned} TVC &= (120 + 6Q + 2Q^2) - 120 \\ &= 6Q + 2Q^2 \end{aligned}$$

$$AVC = \frac{TVC}{q} = \frac{6q + 2q^2}{q} = 6 + 2q$$

To find out the output level at which MC is minimum, we have to set the first derivative of MC function equal to zero. The first derivative of MC function is

$$\frac{d(MC)}{dQ} = 6 + 2q$$

$$6 + 2q = 0$$

$$2q = -6$$

$$q = 3$$

Thus, at output level 3, MC is minimum. It is thus clear from the above that marginal cost takes on the minimum value at an output level smaller than that at which AVC is minimum.

7. Suppose that a local metal fabricator has estimated its short run total cost function and total revenue function is :

$$TC = 1600 + 100Q + 25Q^2$$

$$TR = 500Q$$

What is the breakeven amount of output? How might the company go about reducing the breakeven rate if its does not feel that it can sell the estimated amount in the market place?

Sol :

$$TC = 1600 + 100Q + 25Q^2$$

$$TR = 500Q$$

$$\pi = TR - TC$$

$$TR = P \cdot Q$$

$$TC = TVC + TFC$$

$$TC = AVC \cdot Q + TFC$$

$$Q_B = \frac{TFC}{p - AVC}$$

$$Q_B = \frac{1600}{500 - 100} = \frac{1600}{400}$$

$$= 4$$

$$Q_B = 4 \text{ units}$$

Short Question and Answers

1. Production.

Ans :

Meaning

Production is an activity of transforming the inputs into output. It involves step-by-step conversion of one form of materials into another form through chemical (or) mechanical processing in order to create or enhance the utility or usability of the products or services.

Economics view production is as an activity through which utility for a product is created (or) enhanced.

Definition

According to E.S. Buffa, "Production is an process by which goods and services are created". In economics, the term production means a process in which the resources are transformed or converted into a different and more useful commodity (or) service. In general production means transforming inputs into an outputs. The term production is however limited to "manufacturing organizations" only.

2. Production function.

Ans :

Meaning

The production function is purely a relationship between the quantity of output obtained or given out by a production process and the quantities of different inputs used in the process. Production function can take many forms such as linear function or cubic function etc.

Definitions

- (i) **According to Michael R Baye**, "Production Function" is that function which defines the maximum amount of output that can be produced with a given set of inputs.
- (ii) **According to Samuelson**, "Production Function" is the technical relationship, which reveals the maximum amount of output

capable of being produced by each and every set of inputs, under the given technology of a firm.

3. Cobb Douglas production function.

Ans :

Cobb and Douglas put forth a production function relating output in American manufacturing industries from 1899 to 1922 to labour and capital inputs. They used the following formula:

$$P = bL^a C^{1-a}$$

Where P is total output,

L = The index of employment of labour in manufacturing

C = Index of fixed capital in manufacturing

The exponents a and 1-a are the elasticities of production. These measure the percentage response of output to percentage changes in labour and capital respectively.

The function estimated for the USA by Cobb and Douglas is

$$P = 1.01L^{0.75} C^{0.25}$$

$$R^2 = 0.9409$$

4. Criticisms of Cobb-Douglas production function.

Ans :

- (i) The function includes only two factors and neglects other inputs.
- (ii) The function assumes constant returns to scale.
- (iii) There is the problem of measurement of capital which takes only the quantity of capital available for production.
- (iv) The function assumes perfect competition in the factor market which is unrealistic.
- (v) It does not fit to all industries.

(vi) It is based on the substitutability of factors and neglects complementarity of factors.

(vii) The parameters cannot give proper and correct economic implication.

5. Define iso-cost curve.

Ans :

Meaning

An isocost line shows all combinations of inputs which cost the same total amount. Although similar to the budget constraint in consumer theory, the use of the isocost line pertains to cost-minimization in production, as opposed to utility-maximization.

The isocost line is an important component when analysing producer's behaviour. The isocost line illustrates all the possible combinations of two factors that can be used at given costs and for a given producer's budget. In simple words, an isocost line represents a combination of inputs which all cost the same amount.

6. Economies of Scope.

Ans :

In business parlance, the concept of economies of scope is often used somewhat differently than the concept of economies of scale. It refers to the reduction in unit cost realized when the firm produces two or more products jointly rather than separately. That is to say, a multi-product firm often experiences economies of scope leading to the lowering of costs.

The degree of economies of scope can be measured in terms of the difference in the costs of production jointly and separately. The following formula is used to measure the degree of economies of scope.

$$DES = \frac{TC(A_n) + TC(B_n) - TC(A_n + B_n)}{TC(A_n + B_n)}$$

Where,

DES = Degree of economies of scope

$TC(A_n)$ = Total cost of producing A_n units of product A separately

$TC(B_n)$ = Total cost of producing B_n units of product B separately

$TC(A_n + B_n)$ = Total cost of producing products A and B jointly, i.e., producing A_n units product A and B_n units of product B together.

7. Define cost function.

Ans :

Meaning

The cost function is a function of input prices and output quantity. Its value is the cost of making that output given those input prices. A common form: $c(w_1, w_2, y)$ is the cost of making output quantity y using inputs that cost w_1 and w_2 per unit. The relationship between output and costs is expressed in terms of cost function.

By incorporating prices of inputs into the production function, one obtains the cost function since cost function is derived from production function. However, the nature of cost function depends on the time horizon. In microeconomic theory, we deal with short run and long run time.

A cost function may be written as:

$$C_q = f(Q_i P_i)$$

Where C_q is the total production cost,

Q_i is the quantities of inputs employed by the firm, and

P_i is the prices of relevant inputs. This cost equation says that cost of production depends on prices of inputs and quantities of inputs used by the firm.

8. Implicit costs.

Ans :

Implicit costs are the opportunity costs of the use of factors which a firm does not buy or hire but already owns. Implicit costs are not directly incurred by the firm through market transactions, but nevertheless are to be reckoned in the measurement

of total money costs of production. These are to be imputed or estimated on the bases of the opportunity costs, i.e., from what the factors owned by the firm itself could earn in their next best alternative employment.

9. Explicit Cost.

Ans :

An explicit cost is a direct payment made to others in the course of running a business, such as wage, rent and materials, as opposed to implicit costs, which are those where no actual payment is made. It is possible still to underestimate these costs, however: for example, pension contributions and other “perks” must be taken into account when considering the cost of labour. Explicit costs are taken into account along with implicit ones when considering economic profit. Accounting profit only takes explicit costs into account.

10. Incremental cost.

Ans :

Incremental cost is the overall change that a company experiences by producing one additional unit of goods. Incremental cost is the composition of total cost from the surrogate of contributions, where any increment is determined by the contribution of the cost. If the good being produced is infinitely divisible, so the size of a marginal cost will change with volume, as a non-linear and non-proportional cost function includes the following:

- (i) Variable terms dependent to volume,
- (ii) Constant terms independent to volume and occurring with the respective lot size,
- (iii) Jump fix cost increase or decrease dependent to steps of volume increase.
- (iv) Money Cost

Choose the Correct Answer

1. An input that being changed in the process of production during a given time period is called as _____. [a]
(a) Variable inputs (b) Fixed inputs
(c) None of them (d) Both i and ii
2. Marginal product of labour is the addition to the total product resulting from a unit increase in the employment of _____. [a]
(a) Labour (b) Engineer
(c) Expert (d) None of them
3. The scale of production of a firm is determined by the amount of _____. [a]
(a) Factors units (b) Fixed units
(c) Both of them (d) None of the above
4. An ISO-quant derived from quantity and the Greek word _____. [c]
(a) IGO (b) ISD
(c) ISO (d) None of the above
5. The ISO product curve is _____. [a]
(a) Elliptical (b) Direct
(c) Straight (d) All the above
6. What is a producer's budget line while isoquant is his indifference curve? [a]
(a) Isocost curve (b) Isoquant curve
(c) Both a and b (d) None of the above
7. Isoquant is also called as _____. [d]
(a) Equal product curve (b) Production indifference curve
(c) Constant product curve (d) All the above
8. "A retailer must pay rent and utility bills irrespective of sales" is an example of _____. [a]
(a) Fixed cost (b) Variable cost
(c) Marginal Cost (d) None of the above
9. Which of the following costs are expenses that change in proportion to the activity of a business? [a]
(a) Variable cost (b) Fixed cost
(c) Material cost (d) All the above

10. Which of the followings is the cost concept? [d]
- (a) Real Cost (b) Opportunity Cost
- (c) Money Cost (d) All of them
11. Which cost refers to the physical quantities of various factors used in producing a commodity? [a]
- (a) Real cost (b) Opportunity cost
- (c) Money cost (d) None of them.
12. Short run is a period of time over which at least one factor must _____. [b]
- (a) Remain flexible (b) Remain fixed
- (c) Variable (d) None of the above
13. Which of the following is the correct equation? [a]
- (a) $TVC = F(Q)$ (b) $TVC = E(Q)$
- (c) $TVC = G(Q)$ (d) $TVC = D(Q)$

Fill in the blanks

1. The technological-physical relationship between inputs and outputs is referred to as the _____.
2. Production process involves the transformation of all inputs into _____.
3. The average product refers to the total product per unit of a given _____ actor.
4. Iso-quants are typically convex downward _____.
5. The measure of increased output associated with proportional increases in all inputs is fundamental to the long-run nature of the firm's _____.
6. _____ curve is a producer's budget line while isoquant is his indifference curve.
7. _____ is also called as equal product curve or production indifference curve or constant product curve.
8. An isocost line shows all combinations of inputs which cost the same _____.
9. A profit maximising entrepreneur will seek to minimise his cost for producing a given output, or to put it in another way, he will maximise his output for a given _____.
10. A curve connecting the tangency points is called the _____.
11. _____ refers to the output of goods and services produced by businesses within a market.
12. Production involves the things which are essential for the manufacture of _____.
13. _____ production refers to the manufacturing facility that produces several different products in smaller batches.
14. Money cost is the outlay cost, i.e., actual _____ of the firm.
15. Fixed costs are those costs that are incurred as a result of the use of _____.
16. Total _____ corresponds to fixed inputs in the short run production functions.

ANSWERS

1. Production function
2. Output
3. Variable
4. Sloping curves
5. Production process
6. Isocost
7. Isoquant
8. Total amount
9. Level of outlay
10. Expansion path
11. Production
12. Products
13. Job shop
14. Financial expenditure
15. Fixed factor inputs
16. Fixed cost

UNIT III

MARKET STRUCTURE :

Market Structure and its Classification into Perfect and Imperfect Markets– Perfect Competition – Characteristics – Equilibrium Price Determination – Shut Down Decision Monopoly: Characteristics, Allocative Inefficiency, Income Transfer and Rent Seeking– Price Discrimination- Monopolistic Competition: Characteristics –Price and Output Determination in the Short Run and Long Run Oligopoly: Characteristics – Price Rigidity and Kinked Demand Model

3.1 MARKET STRUCTURE

Q1. Define market. Explain the features of market.

Ans : (Imp.)

Meaning

The term “market” refers to a particular place where goods are purchased and sold. But, in economics, market is used in a wide perspective. In economics, the term “market” does not mean a particular place but the whole area where the buyers and sellers of a product are spread.

Definitions

- (i) **According to Prof. R. Chapman**, “The term market refers not necessarily to a place but always to a commodity and the buyers and sellers who are in direct competition with one another”.
- (ii) **According to A.A. Cournot**, “Economists understand by the term ‘market’, not any particular place in which things are bought and sold but the whole of any region in which buyers and sellers are in such free intercourse with one another that the price of the same goods tends to equality, easily and quickly”.
- (iii) **According to Benham**, “Any area over which buyers and sellers are in such close touch with one another, either directly or through dealers, that the prices obtainable in one part of the market affect the prices paid on other parts”.

Features

The essential features of a market are as follows:

1. Area

In economics, a market does not mean a particular place but the whole region where sellers and buyers of a product are spread. Modern modes of communication and transport have made the market area for a product very wide.

2. One Commodity

In economics, a market is not related to a place but to a particular product. Hence, there are separate markets for various commodities. For example, there are separate markets for clothes, grains, jewellery, etc.

3. Buyers and Sellers

The presence of buyers and sellers is necessary for the sale and purchase of a product in the market. In the modern age, the presence of buyers and sellers is not necessary in the market because they can do transactions of goods through letters, telephones, business representatives, internet, etc.

4. Free Competition

There should be free competition among buyers and sellers in the market. This competition is in relation to the price determination of a product among buyers and sellers.

5. One Price

The price of a product is the same in the market because of free competition among buyers and sellers.

Q2. Explain in detail classification of markets.**Ans :**

Market structures are classified into different types based on area, time element and competition.

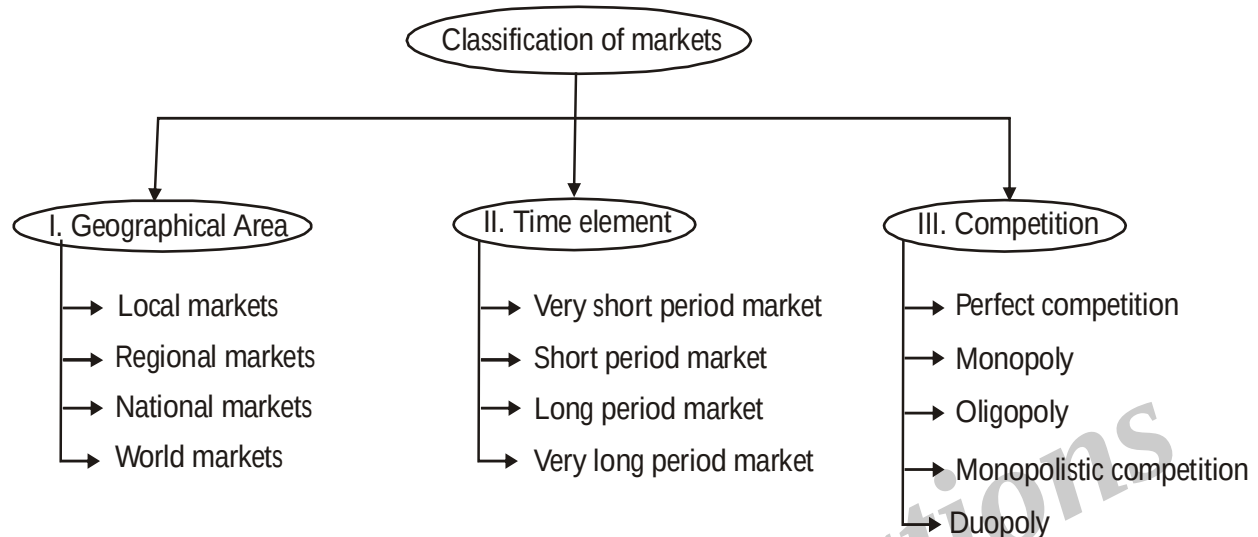


Fig.: Classification of Markets

I. Classification based on Geographical Area Coverage

The geographical area or space elements further involves different types of markets which are as follows,

(i) Local Markets

Local markets refer to the markets which are related to local areas. The market in which buying and selling of commodities is done at a single place or in one locality is called as local market.

(ii) Regional Markets

The market in which the goods are sold within a specific region is called as regional market! For instance many films which are produced in regional languages in India have their regional markets.

(iii) National Markets

The market in which the goods are demanded and sold nationally is called as national market.

(iv) World Markets

World markets or international markets are the markets in which the goods are internationally traded.

II. Classification based on Time Element

Based on time element, markets can be classified into,

- (i) Very short period market.
- (ii) Short period market.
- (iii) Long period market.
- (iv) Very long period market.

(i) Very Short Period Market

The very short period market is the market for a commodity during the short period. In the very short period market, it is physically not possible to change the stock of a commodity by a single unit. It is also impossible to make any adjustments in the supply as per the varying demand conditions in this market. The equilibrium price of a commodity in a very short period market is called as "market price". This price is set by the intersection of very short period demand and very short period supply.

(ii) Short Period Market

The short period market is the market of a commodity during the short period. The short period generally is a functional time period in which firm can expand the output of a commodity to a certain extent by changing the variable inputs like labour, raw materials and so on, based on its fixed plant size. Thus, in this market, the firm is in a condition to make certain adjustments in the supply in the varying demand conditions. The equilibrium price in the short period market is set by the intersection of short period demand and short period supply.

(iii) Long Period Market

The long period market refers to the market for a commodity in the long period. The long period is a functional time period which adequately allows the firm to make changes in the scale of production by changing its plant size. The firm can make full adjustments in the supply according to the changing demand conditions in the long period market. In this market, the equilibrium price of a commodity is called as normal price and is set by the intersection of long period demand and long period supply.

(iv) Very Long Period Market

The very long period market is the market for a commodity in the very long period. The very long period market is considered as a secular time period which continues over a series of decades.

III. Classification based on the Nature of Competition

On the basis of nature of competition, markets are classified into five types. They are,

- i) Perfect competition,
- ii) Monopolistic competition,
- iii) Duopoly,
- iv) Oligopoly and
- v) Monopoly

Q3. What do you understand by market structure? State the characteristics of market structure.

(OR)

What is meant by market structure?

(OR)

Define Market Structure.

Ans :

(Imp.)

Meaning

Market structure is a set of market characteristics that determine the nature of market in which a firm operates. It refers to economically significant features of a market, which affects the behaviour and working of firm in the industry.

Definition

- (i) According to Pappas and Hirschey,** "Market structure refers to the number and size distribution of buyers and sellers in the market for a goods or services".

Thus, market structure deals with the selected number of the characteristics through buyers and sellers.

Characteristics

1. Degree of Seller Concentration

One of the most important criteria to identify the market structure is the degree of seller concentration. The degree of seller concentration refers to the number of firms producing a particular type of product and their market share for that particular product in the market.

2. Extent of Product Differentiation

The extent of product differentiation is also an important criterion to identify the market structure. Product differentiation refers to the extent by which the product of one trader is differentiated from that of the other.

3. Nature of Entry Conditions

The nature for entry of new firms in the market or industry also determines the market structure. In a perfectly competitive market structure, it is assumed that there are no barriers on the entry of new firms. In a monopolistic competition, the entry of new firms in the market is accompanied by new brands of the product. It is the barriers on entry that reduces the number of firms in the market thereby causing imperfection in the competitive market structure.

4. Degree of Buyer Concentration

This refers to the number of buyers and their ability to purchase a given product in the market.

3.1.1 Classification into Perfect and Imperfect Markets

Q4. What are the different types of Market Structure ?

Ans :

The type of market depends on the degree of competition prevailing in the market. Broadly speaking, there are four types of competition prevailing in the markets. These are:

1. Perfect Competition

Perfect competition is characterised by many sellers selling identical products to many

buyers. Perfect market or competition is characterised by many sellers selling identical products to many buyers. The efficient market where goods are produced using the most efficient techniques and the least amount of factors. This market is considered to be unrealistic but it is nevertheless of special interest for hypothetical and theoretical reasons.

2. Imperfect Competition

Imperfect competition is the competitive situation in any market where the conditions necessary for perfect competition are not satisfied. It is a market structure that does not meet the conditions of perfect competition. Forms of imperfect competition include:

(a) **Monopoly:** Monopoly comes from the greek monos, single, and polein, to sell. This is a form of market structure of imperfect competition, mainly characterised by the existence of a sole seller and many buyers. This kind of market is normally associated with entry and exit barriers. Monopoly is a situation of a single seller producing for many buyers. Its product is necessarily extremely differentiated since there are no competing sellers producing near substitute product.

(b) **Monopolistic Competition:** It differs in only one respect, namely, there are many sellers offering differentiated product to many buyers.

(c) **Oligopoly:** In oligopoly, there are a few sellers selling competing products for many buyers. Oligopoly word comes from the Greek oligos, few, and polein, to sell. This kind of imperfect competition is characterised by having a relatively scarce amount of firms, but always more than one, which produce a homogeneous good. Due to the small number of firms in the market, the strategies between firms will be interdependent, thus implying that the profits of an oligopolistic firm will highly depend on their competitors' actions.

- (d) **Duopoly:** Duopoly comes from the Greek *duo*, two, and *polein*, to sell. This is a type of oligopoly. This kind of imperfect competition is characterised by having only two firms in the market producing a homogeneous good. For simplicity purposes, oligopolies are normally studied by analysing duopolies. A is a market that has only two suppliers, or a market that is dominated by two suppliers to the extent that they jointly control prices.

3.2 PERFECT COMPETITION

3.2.1 Characteristics

Q5. What is Perfect Competition Market? Explain the characteristics of Perfect Competition Market.

(OR)

What are the important characteristics of Perfect Competition ?

(OR)

State the features of Perfect Competition.

(OR)

Explain the conditions of Perfect Competition.

(OR)

What are the features of Perfect Competition?

Ans : (Imp.)

Meaning

A perfectly competitive market is one in which the number of buyers and sellers is very large, all engaged in buying and selling a homogeneous product without any artificial restrictions and possessing perfect knowledge of market at a time, e.g., fruit and vegetable market.

Definitions

- (i) **According to A. Koutsoyiannis**, "Perfect competition is a market structure characterised by a complete absence of rivalry among the individual firms".
- (ii) **According to R.G. Lipsey**, "Perfect competition is a market structure in which all firms in an industry are price-takers and in which there is freedom of entry into, and exit from, industry".

Characteristics

The following are features of perfect competition. In other words, these are the assumptions underlying perfect markets.

- 1. Large number of buyers and sellers:** The very first important feature of perfect competition is its number of participants i.e. number of buyers and sellers. Both buyers and sellers are large in number under perfect competition. The existence of these large number of buyers and sellers makes no influence over price of the product. Therefore, the individual firm under perfect competition is a price taker because he has no influence over the price. Whatever price the market demand and market supply collectively decide every firm is expected to follow the same.
- 2. Homogeneous or Similar products:** The second important feature of perfect competition is the commodity which is being sold in the market. It means that the product or commodity which is sold in perfect competition is similar or identical in nature. As the product are identical or similar in nature the firm has no control over the price of the product because products are perfect substitute for one another. No firm can try to charge different price to consumer then the market price due to homogeneous factor of product.
- 3. Free entry and exit of firm:** There are no restriction to the entry and exit of firm in the market. The condition of free entry and free exit of a firm applies only in the long run, in short run firms can neither change the size of

their plants, nor new firms can enter or old firm can leave the market. If the existing old firm earns super normal profit in the short run will attract the new firm to enter in the market in the long run.

4. **Complete market information:** It is assumed that there is a perfect knowledge about the market situation to both buyers and seller in the perfect competition. A perfect knowledge or complete information about the market demand and market supply, price etc. This allows the firms and buyer to take appropriate decision to influence the market demand and supply collectively.
5. **Perfect mobility of factors of production:** Under perfect competition the factors of production are assumed to be freely mobile. Factors of production such as labour and capital are assumed to be mobile. The mobility of factors helps the firm to adjust the market demand with the change in market supply.
6. **No transportation cost:** It is assumed that there is no transportation cost under perfect competition. It applies when the production area and sales market take place in a small geographical area or in the same area. For example, agriculture products are sold in the same village or town which requires no transportation cost.

3.2.2 Equilibrium Price Determination

Q6. How price is determined under perfect competition ?

(OR)

Elaborate price output determination in perfect competition with the help of appropriate diagrams.

(OR)

How the Price-Output Determination under Perfect Competition both in the long and short run.

(OR)

How do you determine Price-Output relationship under Perfect Competition?

(OR)

Analyze the condition of equilibrium of an individual firm under perfect competition both in short run and long run periods with relevant diagrams.

Ans :

(Imp.)

According to Marshall, the price of a commodity in the perfectly competitive market is determined by the demand and supply of all the firms taken together. The demand and supply forces are as much important to determine the price of a commodity as the two blades of a scissors to cut a piece of paper. But Marshall, who propounded the theory that the price is determined by the equilibrium between demand and supply, also laid emphasis on the role of time factor in determination of price. The time factor is important to adjust the supply.

The pricing of a commodity under perfect competition can be determined in three periods of time:

- (a) The market-period
- (b) The short-period, and
- (c) The long-period.

Equilibrium Point

Equilibrium point is the state at which firm enjoys maximum profits and it has no incentive either to reduce or increase its output level. In perfect competition, the firm has to satisfy two conditions to attain equilibrium state.

- (i) Marginal revenue should be equal to marginal cost ($MR = MC$).
- (ii) Marginal Cost (MC) curve should cut the marginal revenue (MR) curve from below. In the case of monopoly, the firm attains equilibrium state if its $MR = MC$.

(a) Price Determination during Market Period

According to Marshall, market-period is too short period to increase the supply. The market-period is so short that supply of the commodity is limited to existing stock.

During the market period, say a single day, the supply of a commodity is perfectly inelastic. On the basis of this 'market' supply and the existing 'market' demand, a temporary equilibrium will be brought between demand and supply setting the 'market' equilibrium price. In the following figure MS is the market-period supply curve which is perfectly inelastic. $D_1 D_1$ is the original demand curve. The supply of the commodity available in the market is OM. This supply is in fixed quantity on any particular day in the market.

The equilibrium price is OP_1 . Now let us assume that the demand for the commodity increases on the day by the shift in the demand curve to $D_2 D_2$. Since the supply of the commodity cannot be increased immediately, its price goes up to OP_2 . Thus, the price of the commodity rises with the rise in demand. During the market-period the demand force is more important than the supply force to influence the equilibrium price. Due to increase in demand the original market-period equilibrium E_1 shift to new equilibrium E_2 .

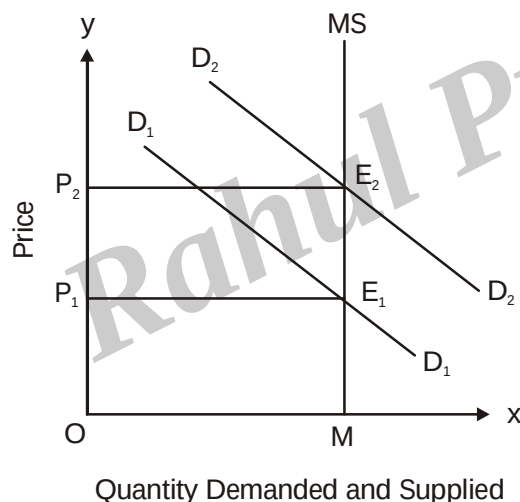


Fig : Price Determination during Market Period

(b) Price-Output Determination during Short-period

Short-period is not too long period to install new capital equipments. It is also not sufficient-period to permit the new firms to enter the industry to increase the supply of the commodity in the market. Hence, the firms can increase the supply of a commodity in the short-period, only by making

intensive use of the given plants and equipments and increasing the units of variable factors.

As a result of this the short-period supply of a commodity will be relatively less elastic. In the following figure OP_1 is the original market price, and OM is the equilibrium quantity demanded and supplied. Due to increase in demand from $D_1 D_1$ to $D_2 D_2$ the price of the commodity goes up from OP_1 to OP_2 due to fixed supply. Due to increased demand and increased price from OP_1 to OP_2 , the supply in the short-period is increased as signified by the short-period supply curve SS. The supply of the commodity has increased slightly from OM to OM_2 . As a result of the increase in the supply, the short-period equilibrium price OP_3 is determined, which is less than the market price OP_2 . However, the short-period equilibrium price OP_3 is higher than the original market price OP_1 . Hence, E_3 denotes short- period equilibrium of the industry and the short-period, equilibrium price is OP_3 .

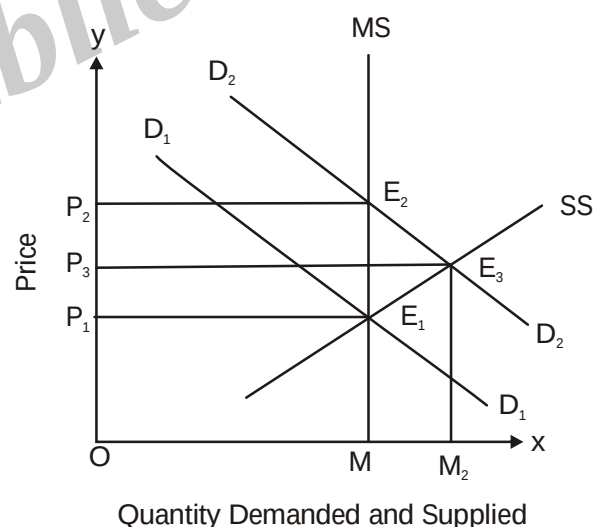


Fig : Price Determination during Short - period

(c) Price - Output Determination in the Long - period

The long-period is sufficiently long to enable the supply to be increased to meet increase in demand. In the long period, the existing firms in the industry can alter their production capacity. Even new firms may also enter the industry, thereby increasing production and supply of the commodity.

In the long-run price is relatively greater elastic. But the long-run price of the commodity may be higher than or lower than or equal to the original market price depending upon increasing costs, diminishing costs or constant costs respectively.

(i) Long-period Price in the Increasing Cost Industry

If all the firms in the industry are experiencing diminishing returns to scale, then the additional output is secured only at the increasing cost. As a result of this, the long-period supply curve of the industry will be positively sloped, indicating the long period supply curves LS.

The following figure shows that OP_1 is the original market price and OM is the original quantity demanded and supplied. An increase in the demand from D_1 to D_2 leads price to increase to OP_2 . But in the long-period, the price falls to OP_4 as the supply has increased from OM to OM_3 . The long-period normal price OP_4 is higher than the original market price OP_1 because of the diminishing returns to scale. However, the long-period price OP_4 is lower than the short-period price OP_3 and the industry is said to be in equilibrium at E_4 .

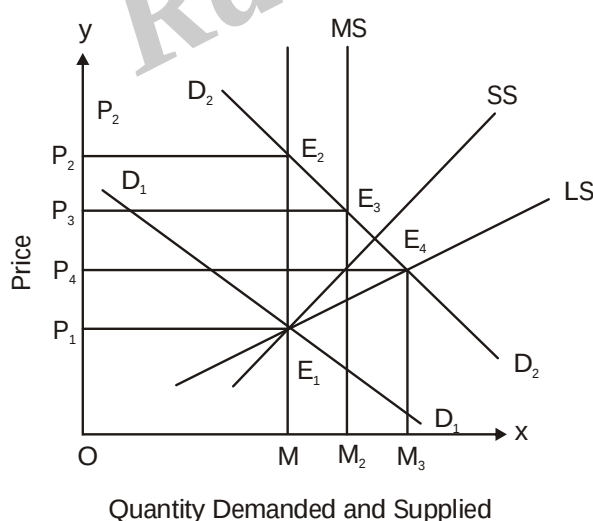


Fig : Price Determination during Long-period

(ii) Long-period Price in the Decreasing Cost Industry

The decreasing cost industry is that wherein the net external economies are so powerful that the long- period price is lower than the original market price.

The following figure shows that OP_1 is the original market price at which OM is the quantity demanded and supplied. An increase in the demand for the commodity is accompanied by the rise in the market price from OP_1 to OP_2 . Due to increase in the supply, the short-period price sets in at OP_3 .

But in the long-period, the price falls to OP_4 . Since, the industry is subject to increasing returns to scale, the net external economies cause the cost per unit to decline. As a result of this, the long-period price OP_4 is lower than even the original market price OP_1 .

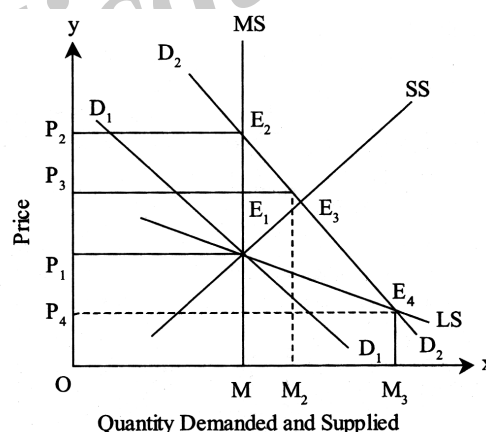


Fig : Price Determination in Decreasing Cost Industry

(iii) Long-period Price in the Constant Cost Industry

The industry which experiences constant returns to scale is called constant cost industry. The firms in the constant cost industry experience such a stage of expansion which gives rise to some external economies and external diseconomies which cancel each other. As a result, there is no shift in the cost per unit. The resultant effect is, the horizontal long- period price determination in the case of constant cost industry. In the following figure, OP_1 is the original market price, the

quantity demanded and supplied is OM. The increase in demand has led the market price to go up to OP_2 as the quantity supplied remains unchanged in the market-period.

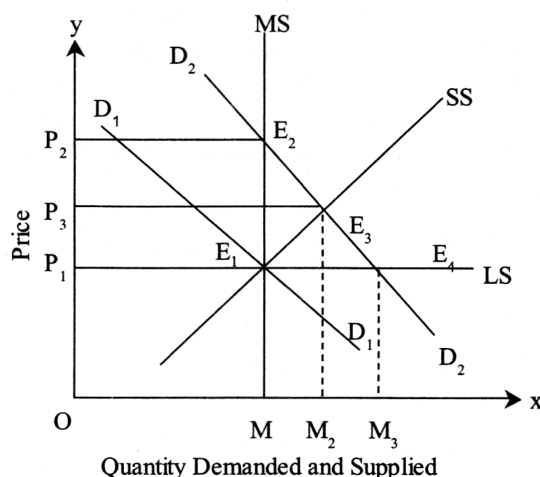


Fig : Price Determination in Constant Cost Industry

However, due to small increase in supply the short-period price sets in at OP_3 which is lower than OP_2 , but higher than the original market price OP_1 . In the long-period, the quantity supplied increases to OM_3 and the price falls to OP_1 . Thus, the long-period normal price coincides with the original market price OP_1 . In the long-period, the constant cost industry is in equilibrium at E_4 supplying OM_3 equilibrium output.

Example for Price Determination Under Perfect Competition

Under this perfect market, prices are fixed by the market forces of total demand and total supply. Nobody is in a position to influence the market price. Everyone has to accept the existing market price. The seller and the buyer cannot bargain.

Consider the following table

Price (per kg) (Rs.)	Total Demand (in kgs)	Total supply (in kgs)	Pressure on Price
20	2000	20,000	Downward
18	4000	15,000	Downward
15	8000	11,000	Downward
14	10,000	10,000	Neutral
12	15,000	4000	Upward
10	20,000	2000	Upward

Table: Demand and Supply Schedules for Rice

If we observe the above table we find that, when the price is Rs. 20, supply of rice is 20,000 kgs but demand for rice is only 2000 kgs. Hence 18,000 kgs of rice supply remains unsold, this will bring a downward pressure on price. Similarly, when the price is Rs. 18, supply of rice is 15,000 but demand for rice is only 4000. Hence supply is in excess of demand. This process will continue till Rs. 14, where total supply and total demand are equal. Hence the equilibrium price at Rs. 14 is fixed.

Similarly if we go from the bottom when the price is Rs.10, supply of rice is 2000 kgs but the demand is 20,000 kgs. Hence, demand exceeds the supply.

This will create an upward pressure on price, hence the price tends to move up. This process will continue until total demand and total supply are equal.

This can be explained with the help of following figure.

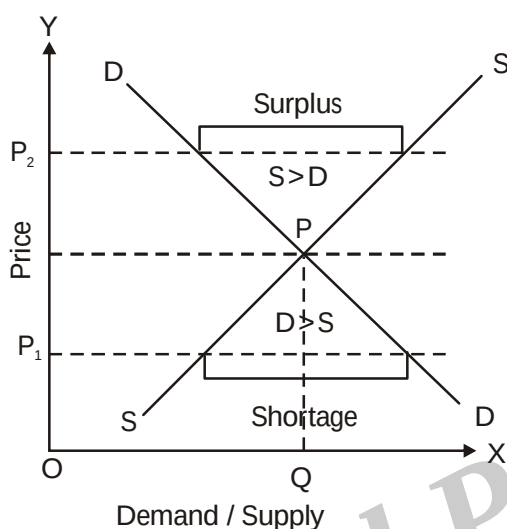


Fig : Price Determination Under Perfect Competition

OX = Quantity demand and supply is measured

OY = Price is measured.

In the above figure, PQ is the equilibrium price at which OQ is the quantity demanded as well as supplied at point P. The demand curve and supply curve intersect.

Below the equilibrium price, demand is greater than supply, hence there is a shortage. Above the equilibrium price, supply is greater than demand, hence there is a surplus.

Q7. "Under perfect competition a firm is a price taker and not a price maker". Explain.

Ans : (Imp.)

The individual firm under perfect competition has no control over the market price. This means

there is no other way for it to accept the price as given by the market. Market forces determine the price and the individual firm has to accept it. The individual firm has absolutely no control over price determination. Thus, the individual firm has no choice other than accepting the given market price.

A good example is agricultural market, where individual farmer has no control over the market price determination and he has to accept the prevailing market price.

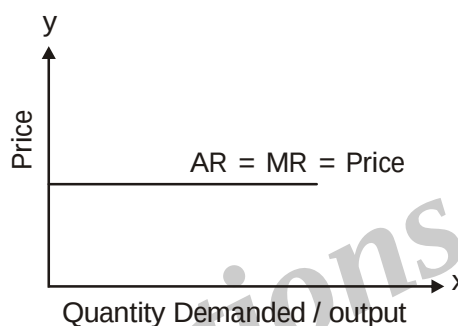


Fig : Demand Curve for the Firm Under Perfect Competition

In the figure above, it can be observed that the demand curve for the output of individual firm is a horizontal line parallel to x-axis at the given market price.

In case of perfect competition, the firm cannot change the market price even if it sells the whole of its produced output. Therefore, the price, Average Revenue (AR), and Marginal Revenue (MR) are equal to each other which are also shown in the figure.

There is only alternative available to a firm is that it can sell any quantity at the given market price. If it wants to sell at a higher price, nobody will buy from it because they can buy same from others at the given market prices, which are lower.

Firm and Industry Equilibrium Under Perfect Competition

Price is determined by the market forces under the conditions of perfect competition. Here the firms have absolutely no control over the prices. The only pricing strategy available to them in perfect competition is to charge the same price as other firms charges. In case of perfect competition, the industry demand curve is negatively sloped curve.

It is because, it indicates the demand from all consumers at various prices.

The industry demand curve 'ID' can be seen in the following figure.

We can also observe the firm's supply curve 'FS' which is rising upward. It indicates that the firm is more interested to sell large quantity at a higher price. It is the price that determines the quantity demanded and quantity supplied. The ultimate price that prevails in the market under perfect competition is one at which quantity demanded is equal to the quantity supplied. This price is also called equilibrium price, as it balances the influence of demand on supply and vice versa.

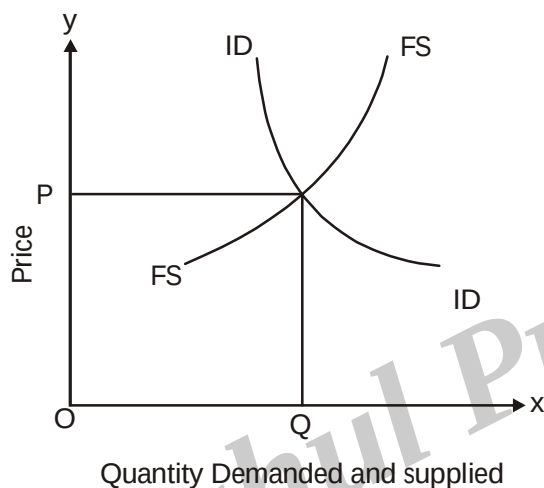


Fig : Price Determination in Case of the Firm and Industry Under Perfect Competition

The figure above, shows how the equilibrium is determined. OP is the equilibrium price at which ID and FS intersect each other. At price OP , the quantity demanded is equal to the quantity supplied. If the price is higher than equilibrium price OP , supply will be more and hence the price is likely to fall due to decrease in demand. As the price falls, demand for quantity will increase. But the quantity supply may decline.

If the price falls below OP , the demanded quantity will rise quickly and the supply is not forthcoming to meet that demand. This will push up the price in the market to OP .

Q8. What are the advantages and disadvantages of Perfect Competition ?

Ans : (Imp.)

Advantages

Advantages of perfect competition can be explained as follows:

1. Consumer Sovereignty

There is consumer sovereignty in a perfect competitive market. The consumer is rational and he has perfect knowledge about the market conditions. Therefore, he will not purchase the products at a higher price.

2. Beneficial to Consumers

In the perfectly competitive market, the price is equal to the minimum average cost. It is beneficial to the consumer.

3. Cost-Saving

The perfectly competitive firms are price-takers and the products are homogeneous. Therefore it is not necessary for the producers to incur expenditure on advertisement to promote sales. This reduces the wastage of resources.

4. Economic Efficiency

In the long-run, the perfectly competitive firm is functioning at the optimum level. This means that maximum economic efficiency in production is achieved. As the actual output produced by the firm is equal to the optimum output, there is no idle or unused or excess capacity.

Disadvantages

Disadvantages of perfect competition can be explained as follows :

1. No Scope for Economies of Scale

This is because there are many small firms producing relatively small amounts. Industries with high fixed costs would be particularly unsuitable to perfect competition. This is one reason why perfect competition is unlikely in the real world.

2. Homogenous Products

Undifferentiated products are boring giving little choice to consumers. Differentiated products are very important in industries such as clothing and cars.

3. Insufficient Profits

Lack of supernormal profit may make investment in R & D unlikely this would be important in an industry such as pharmaceuticals which require significant investment.

4. Free flow of Technology

As there is no patent kind of thing, there is no incentive to develop new technology because it would be shared with other companies.

5. Externalities

If there are externalities in production or consumption there is likely to be market failure without government intervention.

3.3 SHUT DOWN DECISION

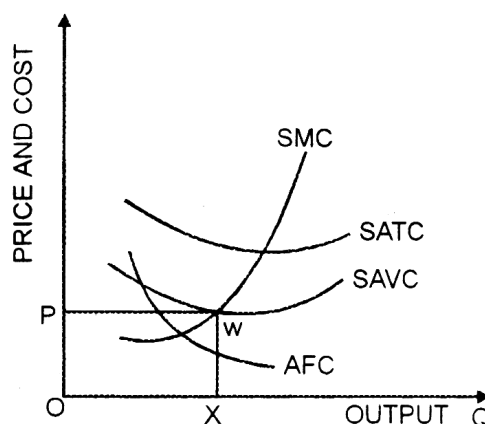
Q9. Explain the concept of Shut down decision.

Ans : (Imp.)

When a firm is incurring losses, there are two options open to it. (i) One option is to continue to produce at the least unprofitable (minimum losses) output (ii) Another option is to shut down operations and produce nothing.

In the short-run, the firm may prefer to stay in business if the price covers at least the average variable cost. Since short run represents a time period during which the firm can not change its fixed capital it continues to incur fixed costs, even if it stops production completely. If the firm stops production, it can avoid only variable costs. The firm will continue to stay in the industry in the short run if the market price covers atleast its average variable costs. We therefore, conclude that as long as price exceeds average variable costs, the firm should continue to produce in the short-run. This is shown in the diagram.

In figure, SAC represents the short run average cost curve and AVC represents the average variable cost curve. That portion of the SMC curve which lies above the average variable cost represents firm's supply curve. Suppose that the price OP_1 is determined in the market. We can see from the diagram that at W, $SMC = MR$. The firm is in equilibrium at this point but it is minimizing its losses.

**(a) Shutdown Point**

Suppose the price is just equal to the average variable cost as indicated by OP . In this case, only average variable costs are recovered. It does not recover even a part of the fixed costs. The revenue the firm makes just covers the costs of variable inputs. If the price is less than OP , the firm cannot recover even variable costs and therefore prefers to close down altogether. It will therefore pay the firm to stop producing anything at all, in the short-run if the price does not cover at least AVC . The firm prefers to shutdown operations.

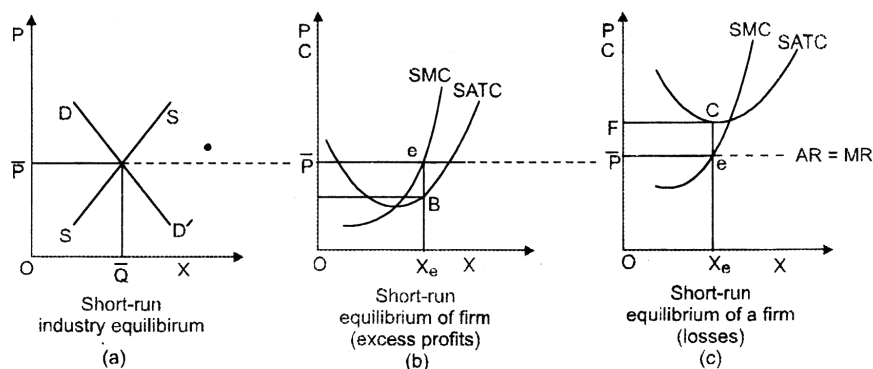
So, we can say that a competitive firm will maximize profits or minimize its losses in the short-run by producing that output at which $SMC = MR$ and price exceeds the average variable cost.

(b) Equilibrium of industry

Given the market demand and supply curves, the industry is in equilibrium at that price which clears the market i.e., the price at which quantity demanded is equal to quantity supplied. In the short-period firms can vary output within their plant capacity. They

cannot dismantle plants and equipment even when they are sustaining losses. Entry or exit of firms can happen only in the long run. However, there will be short-run equilibrium if at the prevailing price firms are making excess profits or losses. Firms making losses will vanish in the long-run if they cannot adjust their plant capacity. Firms making abnormal profits will expand output.

The diagram given below depicts the short-run industry equilibrium.



The market price is determined by demand and supply as shown in figure (a). The two firms attain equilibrium when $SMC = MR$ and the SMC curve cuts the MR curve from below. Firm A makes abnormal profits since the OP price is higher than its $SATC$. Firm B incurs losses since the price is less than its $SATC$.

3.4 MONOPOLY

3.4.1 Characteristics

Q10. What is Monopoly? Explain its features and factors leading to Monopoly.

Ans :

Monopoly as a form of market structure has come to emerge in all the capitalist economies. The perfect competitive structure of markets in capitalist economies now ceases to exist. It is for this reason that the capitalism has assumed the form of monopoly capitalism. In fact, monopoly is an extreme form of imperfect competition. Pure monopoly is never found in practice.

Monopoly form of market is most commonly found in public utility services such as transport, water and electricity supply. If a private entrepreneur monopolises the production or distribution of a product, it is called private monopoly. The monopolization of the production or supply of a product by the government enterprise is called public monopoly.

Classification

'Mono' means singles and 'poly' means seller. The term 'monopoly' refers to that market in which a single firm controls the whole supply of a particular product which has no close substitute. The monopoly firms as a price-maker can be classified into two types.

(i) Simple Monopoly

If the monopoly firm charges the same price from all its clients, it is called simple monopoly.

(ii) Discriminating Monopoly

If the monopoly firm charges different prices from different sets of clients, it is called discriminating monopoly.

The monopoly on the basis of the ownership of the firm can be classified as under,

- (a) **Private Monopoly:** If a private firm monopolises the market, it is called private monopoly.
- (b) **Public Monopoly:** If the market for a product is monopolised by a government enterprise, it is called public monopoly.

Features

(i) Single Firm Market

In a monopoly market there is only one firm producing or supplying a product. That single firm constitutes the whole industry. Hence there is no distinction between firm and industry.

(ii) Absence of Entry

In the pure monopoly market, no outside firm can enter the market. The barriers to the entry of other firms may be economic, institutional, artificial and legal.

(iii) Absence of Close Substitutes

The monopoly emerges when no close substitutes for the product of a firm are available. In such a situation, the cross elasticity of demand between the product of the monopolist and the product of any other firm must be zero or very small. The price elasticity of demand for monopolist's product is also less than one.

Factors

(i) Advance Technologies and Research and Development

The firm can develop new products with new features by using latest technologies or through research and development.

(ii) Government Policies and Legislations

Government often create and maintain monopoly by an act of legislation.

Example

Indian Railways enjoys monopoly as government of India has restricted others. The laws pertaining to patents intellectual property rights, trade marks, copyrights and so on will enhance the monopoly power of firms.

(iii) Through Acquisitions

The business organizations can acquire other business to emerge stronger with higher market share.

- (iv) Gaining control over key inputs such as technology, financial resources, skilled labour, raw materials, machinery and equipments etc., can lead to monopoly.

Q11. Discuss how monopoly is acquired in the mumbai city taxi industry area.

Ans :

Taxi unions hold powerful influence on taxi operators as they represent the cab owners. They used to dominate certain areas of city wherein their taxis are employed. In fact in such areas, no other individual or organization cab is allowed. Even they have restricted autorickshaws also thereby leaving no option for a traveller except hiring a taxi. Further, they have set their own policies like a passenger should sit in the taxi which appears first to him and must pay him the price quoted by them. Even the Government of the city doesn't have direct influence in managing such associations. Mumbai city is also facing monopoly because of the existence of limited number of permit holders which states that no new permits would be issued for the next few years in future. As, old permit holders are not ready to leave the market thereby restricting the new permit holders to enter the market due to space constrained. Even though if Government is trying to bring changes by implementing new schemes, it is usually prohibited by the taxi unions who resist the change by perceiving that they will be losing their employment and profits.

Q12. How is price output determined under monopoly ?**Ans :** (Imp.)**1. Equilibrium of the Monopoly Firm**

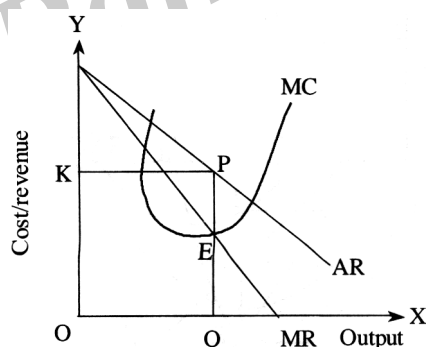
The monopoly firm is faced by two decisions: price determination and output determination. These two decisions are interdependent in the sense that $MC = MR$ condition is imperative for price as well as output determination.

2. Conditions for the Equilibrium of a Monopoly Firm**First Order Condition :** $MC = MR$ **Second Order Condition :** MC curve cuts MR curve from below.

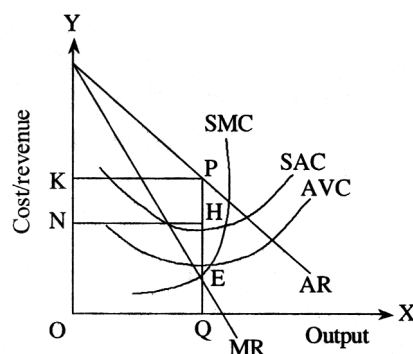
The twin conditions for the equilibrium of the firm are graphically depicted in figure.

In figure, the firm is not in equilibrium at M despite the fulfilment of first-order condition of $MC = MR$ as the second-order condition of MC curve cutting the MR curve from below is not satisfied.

It is only at E the firm is in equilibrium as both the first order and the second-order conditions are satisfied. In the equilibrium position E, the firm sets $QP (= OK)$ price and sells OQ output.

**3. Short-run Equilibrium**

The monopoly firm, during the short-period can increase production by making an effective utilisation of the existing capital equipments. The monopolist as a price-maker would like to fix up a price higher than the Short- period Average Cost (SAC).

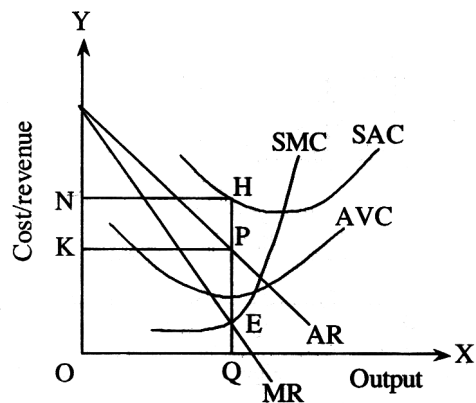


However, it is quite possible for the short-run monopoly price to be lower than the Short-period Average Cost (SAC) but the monopolist will continue to produce output as long as the Average Variable Cost (AVC) is covered. Since the monopolist is a price-maker, there is a greater tendency for the monopolist to have a price higher than AVC and SAC.

But it does not imply that the price (AR) would always be greater than SAC yielding super normal profit in the short-period. In fact, in the short-period the monopoly price may be as high as SAC to give only normal profit or it may even be lower than SAC to give loss.

4. Super Normal Profits

The monopoly firm is in equilibrium at E where $SMC = MR$ and SMC curve cuts MR curve from below. $QP (= OK)$ is the equilibrium price and QP is the equilibrium output. Since AR (price) equal to QP is greater than the SAC equal to QH per unit super normal profit is HR . The total super-normal profit is equal to $PKNH$.

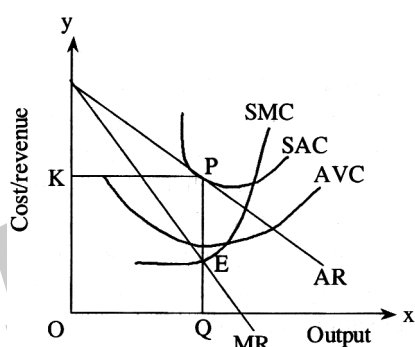


5. Loss

Figure shows monopolist's position of loss in equilibrium. It is evident from the diagram that the monopoly firm is in equilibrium at E where $SMC = MR$ and SMC curve cuts MR curve from below. $QP = (OK)$ is the equilibrium price and OQ is the equilibrium output. Since price (AR) QP is lower than the cost per unit (SAC) QH , the per unit loss is PH . The total loss is $HNKP$.

6. Normal Profits

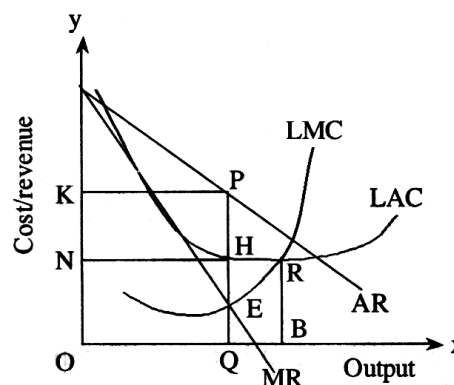
Figure shows the monopolist's equilibrium with normal profit. The firm's equilibrium position is determined at E which corresponds to $SMC = MR$ and SMC curve cuts MR curve from below. OP and QP are the equilibrium price and output respectively. Since price (AR) line is tangent to SAC at P, the firm is just covering the cost thereby getting just the normal profit.



Q13. How is price determined under monopoly in long-run ?

Ans :

The long-run is sufficiently a long period for the monopolist to adjust the plant size or to use the existing plant at any level that maximises his profit. Since there is no entry of outside firms in the monopoly market, there is no competition. In the absence of competition, the monopolist can afford to produce output at sub-optimal scale. That means the monopolist need to produce output at sub-optimal sale.



Therefore, the monopolist need not reach the minimum point of the LAC as the market size does not permit to expand output to produce it at the minimum cost per unit (LAC). However, the monopolist would not stay in the business if he makes losses in the long-period. He will continue to secure super-normal profit even in the long-period as the entry of outside firms is blocked.

Figure explains the long-period equilibrium of a monopoly firm. The firm is in equilibrium at E where $LMC = MR$ and LMC curve cuts MR curve from below. QP is the equilibrium price and OQ is the equilibrium output. Since the price per unit (AR) QP is greater than the cost per unit (LAC) QH , HP represents the per unit super normal profit.

The total super normal profit is equal to $PKNH$. It is important to point out that the equilibrium price QP is determined on the assumption of the absence of the actual entry and potential entry. If there is potential entry in the market, the monopolist will fix up the price at a level lower than QP .

In order to block the potential entry of outside firm the monopolist may fix up price equal to BR . Since the price per unit is equal to the cost per unit at R , the monopoly firm can earn only normal profit even in the long-run if has to prevent potential entry.

Therefore it can be said that in the absence of actual and potential entry of outside firms in the market the monopoly firm can secure super-normal profit in the long period. But in the presence of potential entry, even in to long-period the monopoly firm can earn just normal pre to meet the threat of entry.

3.4.2 Allocative Inefficiency**Q14. Explain various Allocative Inefficiency involved in monopoly market.**

Ans : (Imp.)

Major inefficiencies associated with monopolies include :

1. **Allocative inefficiency** - prices will tend to be higher, and output lower, than what would exist in a market with low barriers to entry. Prices will tend to be higher than both marginal costs and average total cost.
2. **Weakened market forces** - when consumers of a product have many alternatives, producers must serve their customers efficiently in order to stay in business. If consumers can't purchase competitive products easily, the monopolist doesn't need to worry a lot about losing customers when poor service or a poor quality good is provided.
3. **Rent or favor seeking** - firms and/or individuals will put a great deal of effort into obtaining or maintaining high entry barriers; by doing so, they hope to achieve monopoly-type profits. Such efforts enrich some people, at the expense of many others.

Q15. What are the advantages and disadvantages of Monopoly ?

Ans :

Advantages

"Advantages of monopoly can be explained as follows:

1. Research and Development

Supernormal Profit can be used to fund high cost capital investment spending. Successful research can be used for improved products and lower costs in the long term.

Example: Telecommunications and Pharmaceuticals.

2. Economies of Scale

Monopolies can produce at lower costs which makes them more efficient than smaller firms. This in turn increases output which leads to a decrease in average costs of production. These can be passed on to consumers in the form of lower prices.

3. Competition for Corporate Control

Monopolists are subject to the discipline of the financial markets. If a monopoly, with potentially low costs, fails to perform, then it may be a subject to takeover bid.

4. Stability of Prices

In a monopoly market the prices are most of the times stable. This happens because there is only one firm involved in the market that sets the prices if and when it feels like. In other types of market structures prices are not stable and tend to be elastic as a result of the competition that exists but this is not the case in a monopoly market as there is little or no competition at all.

5. Source of Revenue for the Government

The government gets revenue in form of taxation from monopoly firms.

6. Massive Profits

Due to the absence of competitors which leads to high number of sales monopoly firms tend to receive super profits from their operations. The massive profits realised may be used in such things as launching other products, carrying out research and development among many other things that may be beneficial to the firm.

Disadvantages

Following are the disadvantages of monopoly:

1. Exploitation of Consumers

A monopoly market is best known for consumer exploitation. There are indeed no competing products and as a result the consumer gets a raw deal in terms of quantity, quality and pricing. The firm may find it easy to produce inferior or sub-standard goods if it wishes because the end of the day they

know very well that the items will be purchased as there are no competing products for the already available market.

2. Dissatisfied Consumers

Consumers get a raw deal from a monopoly market because quality will be compromised. Therefore it is not a wonder to see very dissatisfied consumers who often complain about the firm's products.

3. Higher Prices

No competition in the market means absence of such things as price wars that may have benefited the consumer and as a result of this monopoly firms tend to charge higher prices on goods and services hence inconveniencing the buyer.

4. Price Discrimination

Monopoly firms are also sometimes known for practicing price discrimination where they charge different prices on the same product for different consumers.

5. Inferior Goods and Services

Competition is minimal or totally absent and as such the monopoly firm may willingly produce inferior goods and services because after all they know the goods will not fail to sell.

6. Prices and Costs

These will be higher than under perfect competition. Under perfect competition, firms are forced to produce at the lowest cost possible, taking into account the current state of technology and available resources, which keeps prices down while allowing them to make a reasonable profit. However, barriers to entry allow the monopolist to charge higher prices and make large profits, even if it is not producing in the most efficient way.

Q16. Distinguish between Perfect Competition and Monopoly

Ans :

(Imp.)

S.No.	Nature	Perfect competition	Monopoly
1.	Relation between AR	$AR = MR$	$AR > MR$
2.	Profit in the long-run	Normal profits in the long-run also.	Supernormal profits in the long-run
3.	Number of sellers	Large number of sellers	Single seller
4.	Barriers to entry and exit	Free entry and exit, as there are no barriers.	There are strong barriers
5.	Control on price taker	The seller is only the price taker.	Monopolist is the price maker
6.	Nature of demand-curve	Perfectly elastic	Inelastic
7.	Relationship between firm and industry	Each firm is a part of the industry.	Firm and industry are one and the same.

3.5 INCOME TRANSFER AND RENT SEEKING

Q17. Explain briefly about Income Transfer and Rent Seeking.

Ans :

When a firm uses its resources to procure an unwarranted monetary gain from external elements, be it directly or indirectly, without giving anything in return to them or the society, it is termed as rent-seeking.

Instead of creating wealth, a firm seeks to obtain financial gains from others through alteration/ manipulation of the environment where economic activities take place. A popular example for rent-seeking is political lobbying by companies. These are primarily done by companies in order to make economic gains through government action.

This might be done by a company to get subsidy from the government for the product which it produces or increasing tariff rates by the government for its services, etc. Such a practice neither leads to creation of new wealth, nor does it benefit the society.

Rent seeking can disrupt market efficiencies and create pricing disadvantages for market participants. It has been known to cause limited competition and high barriers to entry.

Those that benefit from successful rent seeking obtain added economic rents without any added obligations. This can potentially create unfair advantages, specifically providing wealth to certain businesses that leads to greater market share at the detriment of competitors.

Lastly, rent seeking wealth is typically a function of taxpayer funding. These tax revenues are used to provide economic wealth for rent seekers but may or may not improve the economic climate or produce any benefits for taxpayers-at-large. This can lead to disparaging funds that lack regeneration and require higher taxes in the future.

3.6 PRICE DISCRIMINATION

Q18. What is Price Discrimination? Discuss different ways of Price Discrimination.

Ans : (Imp.)

Meaning

A monopoly firm which makes use of the price discrimination policy is termed as discriminating monopoly. Price discrimination indicates the act of selling the output of the same product at different prices to different buyers or in different markets.

In a wider sense, price discrimination takes place in two ways i.e.,

- (i) By charging different prices for same product.
- (ii) By not fixing the prices of different varieties of products or different products related to their cost differences. But in the theory of discriminating monopolies, for simplicity and convenience, the meaning of price discrimination is restricted only to charging of different prices for the same product to different buyers or in different markets.

Forms

There are several forms of price discrimination. Some of the common forms of price discrimination are as follows,

1. Personal Discrimination

Based on the economic status of the buyers, different prices are charged to different buyers while providing similar services. For instance, a lawyer charges different fees to different types of clients based on their income status.

2. Age Discrimination

This discrimination is based on the age of the buyers. The buyers are mostly grouped into children and adults. For example, in a barber shop the price charged for children's hair cut will be less than the adult's hair cut.

3. Sex Discrimination

While selling some products, the producers make differences between male and female buyers by charging a low price to female buyers. For example, travel agency may give seats to ladies at concessional rates.

4. Locational or Territorial Discrimination

Locational or geographical discrimination takes place when a monopolist charges different prices in different markets which are located at different places. For example: A firm may make differences between domestic and export markets for its products.

5. Size Discrimination

In size discrimination, different prices are charged on the basis of size or quantity of the product. For example, an economy size washing powder packet is relatively cheaper than a small size packet. In the same way the producers sell the products in retail market at a higher price than in the wholesale market.

6. Quality Variation Discrimination

In this type of variation, different prices may be charged for the same product depending on some qualitative differences. Quality variation is observed in the form of material used, the nature of packing, colors, style, etc. For example, cars with metallic colours have high price than cars with ordinary colours.

7. Special Service or Comforts

Price discrimination is also subjected to the special facilities or comforts. For example, in railways, fare price is different for first class passengers and second class passengers.

8. Use Discrimination

Use discrimination takes place when the price is charged based on the usage of the product. For example, electricity distribution company charges low rates for domestic consumption of electricity whereas high rates for commercial usage of electricity.

9. Time Discrimination

The time factor is also considered in price discrimination. For example, telephone company charges less rate for calls made in night hours.

10. Nature of Commodity Discrimination

Sometimes, price discrimination is made depending on the nature of commodity. For

example, freight charges by the railways are different for coal and iron for the same distance.

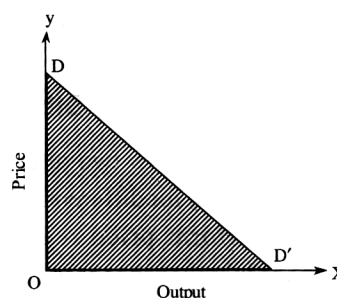
Q19. What are the various degrees of price discrimination?

Ans :

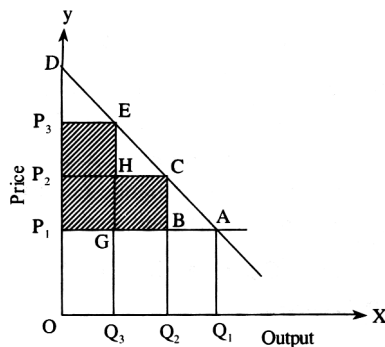
The degree of price discrimination is ascertained on the basis of the magnitude of the loss of consumer surplus caused by it. The term consumer surplus denotes what the consumer saves by actually paying price less than what he is willing to pay. The loss of consumer surplus takes place because the consumer is required to pay high price now. The size of the loss of consumer surplus depends upon the degree of price discrimination.

First-degree Price Discrimination

If the monopolist charges different prices from each different consumer, then it is called the first-degree discrimination. In fact, the first degree price discrimination indicates as many prices as many consumers. This type of price discrimination completely wipes out the consumer surplus. It is explained in figure.

**Second-degree Price Discrimination**

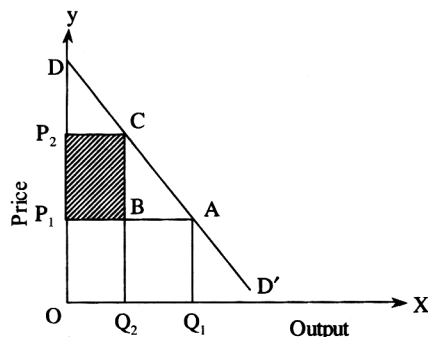
If the monopolist divides the total market for his product into more than two sub-markets and sells his output at more than two different prices, it is called second degree price discrimination. The figure explains the second-degree price discrimination. If the monopolist sells his whole output OQ_1 at price P_1 he would receive total revenue OQ_1AP_1 and the consumer surplus DP_1A .



If the monopolist can sell OQ_3 at P_3 price, Q_3Q_2 output at P_2 price and Q_2Q_1 output at P_1 price, and Q_2Q_1 output at P_1 price, then his total revenue would be $OQ_3EP_3 + Q_3Q_2CH + Q_2Q_1AB$. As a result, the loss of consumer surplus increases as denoted by the shaded areas.

Third-degree Price Discrimination

If the monopolist divides the total market for his product into two sub-markets and sells his output at two different prices, it is called third-degree of price discrimination.



The figure explains the third-degree price discrimination. If the monopolist sells the whole output OQ_1 at price P_1 , he would receive total revenue OQ_1AP_1 and consumer surplus is DP_1A .

Let us now assume that the monopolist sells OQ_2 output at price P_2 and the remaining quantity Q_2Q_1 at price P_1 then his total revenue would be $OQ_2CP_2 + Q_2Q_1AB$. Thus, as a result of price discrimination the monopolist's total revenue has increased by P_1BCP_2 which represents the loss to consumers. Hence, due to price discrimination the loss of consumer surplus is equal to P_1BCP_2 as denoted by the shaded rectangle.

Q20. Explain dumping as special case of price discrimination.

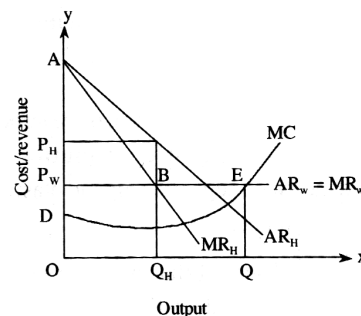
Ans :

Dumping is a special case of price discrimination. Mrs. Joan Robinson has defined dumping as selling at a lower price in an export market and at a higher price at home. This form of price discrimination takes place when the producer enjoys monopoly in the home market, but faces perfect competition in the world market. Thus, the product being a monopolist is a price-maker in the home market, but is a price-taker in the perfectly competitive world market.

It is significant to note that the producer being a monopolist is confronted with a downward sloping demand curve (AR), whereas he faces a perfectly elastic demand curve ($AR=MR$) in the perfectly competitive world market.

Since the price elasticity of demand in the monopolistic home market is less than one, the producer fixes up high price in this market. Whereas, in the perfectly competitive world market the producer sells at the prevailing market price which is lower than the monopoly price in the home market. It is because monopoly price is always higher than the competitive price.

The figure shows that in the monopoly home market, AR_H is the average revenue curve and its corresponding marginal revenue curve is MR_H . In the perfectly competitive world market the average revenue coincides with marginal revenue as denoted by $AR_w = MR_w$. Since the commodity sold in both the market is the same, so the marginal cost curve-MC is the same for both the markets.



The aggregate marginal revenue is represented by the composite curve $ABEC$ which is the lateral summation of MR_H and MR_w . In the

process of lateral summation P_w B portion of the MR_w and BMR_w production of MR_H become redundant. The equilibrium total output is determined by the condition.

$$MC = AMR \text{ (Aggregate Marginal Revenue)}$$

The firm is in equilibrium at E where $MC = AMR$ and the equilibrium total output is OQ. The total output OQ is distributed between the home market and world market in such a way that

$$MC = MR_H = MR_w$$

The area DEB A represents the total profit earned by the firm from both the markets.

3.7 MONOPOLISTIC COMPETITION

3.7.1 Characteristics

Q21. What is monopolistic competition? Explain the features of monopolistic competition.

(OR)

Write about the features of monopolistic competition.

Ans :

(Imp.)

Meaning

Monopolistic competition refers to a market situation where there are many firms selling a differentiated product. "There is competition which is keen, though not perfect, among many firms making very similar products". No firm can have any perceptible influence on the price-output policies of the other sellers nor can it be influenced much by their actions. Thus, monopolistic competition refers to competition among a large number of sellers producing close but not perfect substitutes for each other.

Definitions

- (i) **According to J.S. Bains**, "Monopolistic competition is market structure where there is a long number of small sellers, selling differentiated but close substitute products".
- (ii) **According to Baumoul**, "The term monopolistic competition refers to the market structure in which the sellers do have a monopoly (they are the only sellers) of their

own product, but they are also subject to substantial competitive pressures from sellers of substitute product".

Monopolistic competition is the main form of imperfect competition. Thus, imperfect competition is a market situation wherein one or more conditions of perfect competition are absent.

Features

The important characteristics of monopolistic competition are :

1. Existence of Many firms

Industry consists of a large number of sellers, each one of whom does not feel dependent upon others. Every firm acts independently without bothering about the reactions of its rivals. The size is so large that an individual firm has only a relatively small part in the total market, so that each firm has very limited control over the price of the product. As the number is relatively large it is difficult for these firms to determine its price- output policies without considering the possible reactions of the rival forms. A monopolistically competitive firm follows an independent price policy.

2. Product Differentiation

Product differentiation means that products are different in some ways, but not altogether so. The products are not identical but the same time they will not be entirely different from each other. IT really means that there are various monopolist firms competing with each other. An example of monopolistic competition and product differentiation is the toothpaste produced by various firms. The product of each firm is different from that of its rivals in one or more respects. Different toothpastes like Colgate, Close-up, Forehans, Cibaca, etc., provide an example of monopolistic competition. These products are relatively close substitute for each other but not perfect substitutes. Consumers have definite preferences for the particular varieties or brands of products offered for sale by various sellers. Advertisement, packing, trademarks, brand names etc. help differentiation of products even if they are physically identical.

3. Large Number of Buyers

There are large number buyers in the market. But the buyers have their own brand preferences. So the sellers are able to exercise a certain degree of monopoly over them. Each seller has to plan various incentive schemes to retain the customers who patronize his products.

4. Free Entry and Exist of Firms

As in the perfect competition, in the monopolistic competition too, there is freedom of entry and exit. That is, there is no barrier as found under monopoly.

5. Selling costs

Since the products are close substitute much effort is needed to retain the existing consumers and to create new demand. So each firm has to spend a lot on selling cost, which includes cost on advertising and other sale promotion activities.

6. Imperfect Knowledge

Imperfect knowledge about the product leads to monopolistic competition. If the buyers are fully aware of the quality of the product they cannot be influenced much by advertisement or other sales promotion techniques. But in the business world we can see that though the quality of certain products is the same, effective advertisement and sales promotion techniques make certain brands monopolistic. For examples, effective dealer service backed by advertisement-helped popularization of some brands through the quality of almost all the cement available in the market remains the same.

7. The Group

Under perfect competition the term industry refers to all collection of firms producing a homogenous product. But under monopolistic competition the products of various firms are not identical though they are close substitutes. Prof. Chamberlin called the collection of firms producing close substitute products as a group.

3.7.2 Price and Output Determination in the Short Run and Long Run**Q22. How is price output determined under monopolistic competition ?****(OR)****Explain the Price-Output Determination in Monopolistic Competition.****Ans :****(Imp.)**

It is common that every firm whether operating under perfect market or imperfect market, wants to maximize the profits. It means that the firm under monopolistic competition also will reach equilibrium when its marginal cost equals its marginal revenue ($MC = MR$). The demand curve for the firm in case of monopolistic competition is just similar to that of monopolist.

As the products are differentiated, the demand curve has a downward slope, In other words, each firm has a limited control over price. These firms are price makers as far a given group of customers is concerned. The demand for their products and services is relatively inelastic. The degree of elasticity of demand of a firm in monopolistic competition depends upon the extent to which the firm can resort to product differentiation. The greater the ability of the firm to differentiate the product, the less elastic the demand is. The firm's influence to increase the price depends upon the extent to which it can differentiate the product. At lower prices, the firm can sell more. There is no significant variant in the cost functions also.

(A) Price-Output Determination in Short-run

In the short-run, firms may experience supernormal or normal profits or even losses. When there is a fall in costs or increase in demand, the firms may enjoy supernormal profits. In other words, if the firm satisfies the following two conditions, it may take supernormal profits.

- Where marginal cost is equal to marginal revenue ($MC = MR$).
- Where a average revenue is less than average cost ($AR < AC$).

The firm may be in losses when the costs rise or demand decreases.

Figure below reveals that the demand curve is a downward sloping curve because of product differentiation. The cost functions of a firm are not different from those of earlier market situations. At F, marginal cost (MC) is equal to marginal revenue (MR), extend F to point B on average revenue (AR) curve and Point Q on X axis.

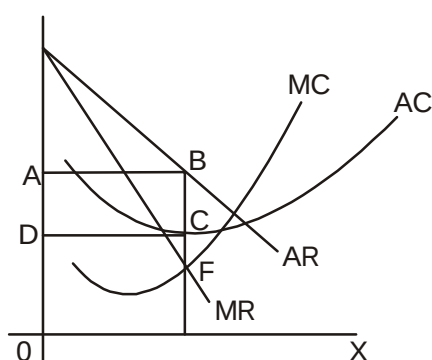


Fig.: Price-Output Determination in Monopolistic Competition in the Short-run

OQ is the equilibrium output, OA = OB = Equilibrium price and QC is the average cost. Average profit = average revenue minus average cost. BC is the average profit. Profit $\times$ Quantity = Total profit.

The area ABCD represents the supernormal profits earned by a firm under monopolistic competition in the short-run.

(B) Price-Output Determination in Long-run

More and more firms will be entering the market having been attracted by supernormal profits enjoyed by the existing firms in the industry. As a result, competition becomes intensive on one hand, firms will compete with one another for acquiring scarce inputs pushing up the prices of factor inputs. On the other hand, on the entry of several firms the supply in the market will increase, pulling down the selling price of the products.

In order to cope with the competition, the firms will have to increase the budget on advertising. The entry of new firms continue till the supernormal

profits of the firms completely get eroded and ultimately firms in the industry will earn only normal profits. Those firms which are not able to earn at least normal profits will get closed.

Thus in the long-run, every firm in the monopolistic competitive industry will earn only normal profits, which are just sufficient to stay in the business. It is to be noted that normal profits are part of average costs.

In the long-run, in order to achieve equilibrium position, the firm has to fulfil the following two conditions.

- a) $MR = MC$
- b) $AR = AC$

At the equilibrium level of output.

Thus, the firm has to fulfil dual equilibrium conditions as mentioned above. But when compared to long run equilibrium position of a perfectly competitive firm, even though $AR = AC$, AC will not be at its minimum point at equilibrium level of output. And also, MR is not equal to either AR or AC, MR is well below AR in the case of monopolistic competitive firm.

Why Average Cost (AC) is not Equal to Average Revenue (AR) at its Minimum Point

It is because, the average cost (AC) can be tangential to the downward sloping average revenue (AR) curve only at higher than its minimum point. The average (AC) is higher in case of monopolistic competitive firms because of excess or idle capacity and high advertising costs.

From Fig. below, it can be observed that in the long-run, the average cost (AC) curve will be tangential to the downward sloping average revenue (AR) curve at point E. It can be noted that the average cost curve is tangential to the average revenue curve at higher than its minimum point F. $MR = MC$ at point K. OQ is the equilibrium output and OP is the equilibrium price.

Thus, in the long-run, a firm under monopolistic competition achieves equilibrium price and output level when both conditions of equilibrium are satisfied.

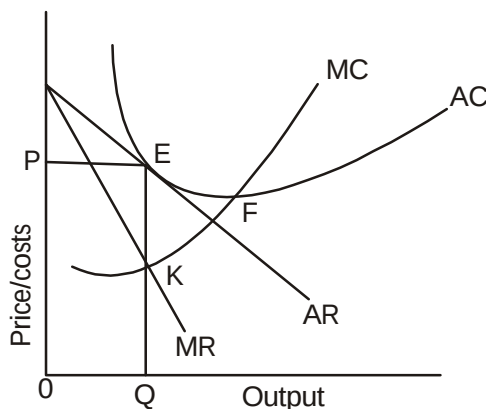


Fig.: Price-output Determination in Monopolistic Competition in the Long run

Q23. What are the advantages and disadvantages of Monopolistic Competition ?

Ans :

Advantages

The advantages of monopolistic competition are as follows:

1. Promotion of Competition (Lack of Barriers to Entry)

In such a market, one of its primary aspects is that there is a lack of barriers to entry (factors that cause difficulty for a new firm to enter the market, e.g., intellectual property rights, advertising, large start-up costs, etc.), hence making it relatively easy for firms to enter (and exit) the market. This therefore ensures (atleast in the long run) no 'single firm' will find themselves with monopoly power (and with that - the ability to exploit consumers), due to new entering firms to the market.

2. Differentiation Brings Greater Consumer Choice and Variety

One of the main positives to come out of a monopolistically competitive market is that in order to be a competitive firm within such a marketplace, a firm's primary goal is to differentiate itself from others in order to gain greater custom than its rival competitors - essentially appealing to consumer sovereignty

(where consumers determine the goods to be produced within a market). With this, is the provision of greater choice and variety of products and services for consumers to purchase from - they have a wider range of consumer choice as opposed to just a single choice (either just one product - monopoly - or all the products are generic and homogenous - perfectly competitive).

3. Product and Service Quality Development

An advantage of monopolistic competition is that it enhances a firm's ability to improve a product's quality through its brand. Economists defend branding as a way to enhance trust and reliability to the consumer. Brands strengthen the need to maintain high quality based on the business's financial stake in its reputation.

4. Consumers Become More Knowledgeable of Products

A positive externality from monopolistic competition and the intense advertising and marketing that accompanies it, is that due to firms trying to differentiate their products - consumers become more informed and aware of their options regarding such products and services. They can gain an understanding of the unique features and aspects that certain products have compared to that of others. Hence, with this comes further competition, as firms can recognize what consumers are wanting to a better degree.

Disadvantages

Following are the disadvantages of competition:

1. Liable of Excess Capacity

A negative factor of firms that are in monopolistic competition is that they do not produce enough output to efficiently lower the average cost and benefit from economies of scale. They are reducing their 'economic

profits', as a result of the marginal revenue being less than that of the marginal cost. Moreover, the funding and expense that goes into packaging, marketing and advertising can be deemed extremely wasteful on some levels.

2. Allocatively Inefficient

Compared with perfect competition, it can be shown that such firms that there is an element of allocation efficiency as the price is above that of the marginal cost curve - less so in the long-run, due to more competition. As the demand curve is one which is downward sloping this then implies the price has to be greater than the marginal cost for a monopolistically competitive firm. Hence it is allocatively inefficient as not enough of the product gets produced for society to benefit - they want more, however this would force the company to lose money.

3. Higher Prices

Another drawback of a monopolistic competition is that as a result of firms having 'some market power', they can extenuate a mark-up on the marginal cost of revenue. Compared to a perfectly competitive firm, who have their price equal to their marginal cost. This would be difficult for a governmental authority to regulate for two reasons:

- (i) There are many firms; and
- (ii) They would be making a loss - hence eventually forcing such firms out of business.

4. Advertising

Advertising and marketing can be beneficial to consumers on some levels such as providing information to customers and from this an increase in competition; it can also have negative impacts on consumer sovereignty. It is argued to manipulate and distort what consumers desire, as well as obviously reducing competition as consumers become captivated over the perception of differentiation.

3.8 OLIGOPOLY

3.8.1 Characteristics

Q24. Define oligopoly. Explain the features of oligopoly.

(OR)

What is oligopoly? And Explain its salient features.

(OR)

Why oligopoly types of market emerged? And describe its salient features.

Ans : (Imp.)

Meaning

Oligopoly is situation where a few large firms compete against each other and there is an element of interdependence in the decision-making of these firms. Each firm in the oligopoly recognises this interdependence. Any decision one firm makes (be it on price, product or promotion) will affect the trade of the competitors and so results in countermoves. As a result, one's competitor's behaviour depends on one's own behaviour, and this must be taken account of when decisions are made. A major policy change on the part of one firm will have obvious and immediate effects on its competitors.

Definitions

- (i) **According to P.C. Dooley**, "An oligopoly is a market of only a few sellers, offering either homogenous or differentiated products. There are so few sellers that they recognise their mutual dependence."
- (ii) **According to Mansfield**, "Oligopoly is a market structure characterized by a small number of firms and a great deal of interdependence."
- (iii) **According to Grinols**, "An oligopoly is a market situation in which each of a small number of interdependent, competing producers influences but does not control the market".

- (iv) **According to Mc Connell**, “Oligopoly is a market situation in which number of firms in an industry is, so small that each must consider the reactions of rivals in formulating its price policy.”

Features

1. Few Firms

Oligopoly is the market in which few firms compete with each other. The simplest model of oligopoly is duopoly. Duopoly is the market structure when only two firms produced and supply the product.

2. Nature of the Product

All the new firms produce an identical product. Such market is called pure or perfect oligopoly. Where product differentiation is there then it is called imperfect oligopoly.

3. Interdependence of Firms

There is interdependence among firms. Each firm threats the other firms as its rivals.

4. Indeterminateness

The oligopoly firm's demand curve for the product is in determinant because the firm cannot assume that the rival firms will not change their prices in response to change in price effected by it.

5. Complex Market Structure

The market structure of oligopoly is quite complex. On one hand there is a rival and on the other hand there may be collusion. Cartel is an example of collusive oligopoly. The non-collusive oligopoly is the other form of complex market structure.

6. Selling Costs

Each firm pursues an aggressive and defensive marketing strategy to gain a greater share in the market. Advertising is an important method used by oligopolist to gain larger share in the market. The costs incurred on advertisements are selling costs.

Q25. Explain the classification of Oligopoly.

Ans :

The oligopoly may be classified in the following categories:

1. Perfect or Imperfect Oligopoly

Perfect oligopoly is that situation in which all the firms produce homogeneous products. It is also known as pure oligopoly. On the other hand imperfect or differentiated oligopoly is that market situation in which all firms produce differentiated but close substitutes.

2. Open or Closed Oligopoly

Open oligopoly is that market situation in which there is no barrier on the entry of the firm in the industry. The entry of the firm is free. But in the situation of closed oligopoly there is barrier on the entry of the firm in the industry. The barrier may be technological, legal or of any other type.

3. Partial or Full Oligopoly

Partial oligopoly is that situation in which there is a dominant firm in the industry. This dominant firm is called the price leader. The dominant firm or the price leader fixes the price and others follow that price. Full oligopoly, on the other hand, is that situation in which there is no dominant firm or price leader.

4. Collusive or Non-collusive Oligopoly

Collusive oligopoly is that oligopoly in which the firms cooperate with each other in determining the price. They follow a common price policy and do not compete with each other. Non-collusive oligopoly is that oligopoly in which the firms act independently. They compete with each other and determine independently the price of their products.

3.8.2 Price Rigidity and Kinked Demand Model

Q26. What is kinked demand hypothesis? What does it explain?

(OR)

Write about kinked demand curve. State its assumptions.

Ans :

Paul Sweezy formulated a model to explain interdependence among firms in the oligopoly market. This model also recognizes the uncertainty of rival firm's reaction. On the basis of interdependence among firms and uncertainty of rival firm's reaction, this model explains that the oligopoly price is insensitive to market forces. It implies stickiness or rigidity of price in the oligopoly market. The explanation of rigidity of price in the oligopoly market has been given in terms of kinked demand curve.

Since an oligopolist does not know how his competitors will react, he has to make guess. That is why oligopoly has been linked to a game where various options are open to the players. An oligopolist may assume that his competitors will follow him, if he increases or decreases the price. Alternatively, he 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 alternative hypothesis is the basis of Kinked demand curve.

Assumptions of the Kinked Demand Curve

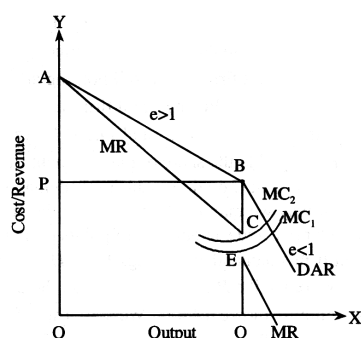
- (i) There are two firms namely A and B.
- (ii) Product of both the firms is homogeneous.
- (iii) There is a particular price prevailing in the market.

It is assumed to be OP as is shown in figure.

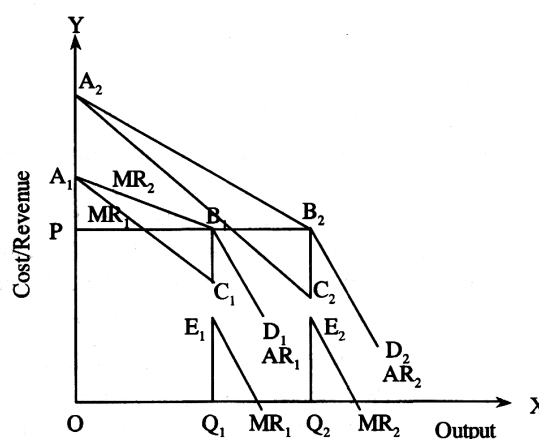
In figure the demand curve-AD is kinked at B with its two segments. The segment AB is relatively greater elastic and the other segment BD is relatively less elastic. Since the demand curve (AR) - AD is discontinuous, so the corresponding MR curve is also not continuous.

The MR curve's segment AC corresponds to AR curve's segment AB. The MR curve's segment starting from E corresponds to BD segment of the AR curve.

Assume that the firm A raises the price above the prevailing price OP. Now the firm B will not raise the price. As a result the demand for A's production will decline considerably. So firm A will reduce the price. Hence, the price is rigid at the level of OP.



Assume that the firm A reduces the price below prevailing price OP. Now firm B reacts by reducing the price so that the firm A may not take away whole of the market. As the firm A has not gained by reducing the price, so it will raise the price to the prevailing level of OP. Hence price is rigid at OP. The price rigidity or stickiness is also established by the fact that any shift in the MC curve also does not affect the price. The price also remains rigid despite shift in the demand curve.



Hence, Paul Sweezy has emphasized the price rigidity as the basic feature of the non-collusive oligopoly. Kinked demand curve is the logical deduction from price rigidity.

Q27. How price is determined under collusive oligopoly ?**Ans :**

The term collusion implies to play together. The oligopolistic firms arrive at a formal agreement about price-output instead of competing with each other. The competing firms form a cartel. The cartel is a common sales agency formed to eliminate competition and fix such a price and quantity of output that will maximise profits of the member firms. The cartel determines the price output for whole of the industry as well as for each member firm. In other words, the cartel administration determines the equilibrium total output as well as equilibrium quantity of output of each member firm. Assumptions of the cartel are as follows.

- (i) It is assumed that there are two firms namely A and B. These firms form a cartel.
- (ii) The products of firms A and B are homogeneous.
- (iii) The costs of production of firms A and B are different.
- (iv) The cartel determines such price-output combination which ensures maximum profits for whole of the oligopolistic industry.

The cartel estimates the total demand for the industry's product. It is signified by the curve-AD in figure. The marginal revenue curve-MR in the diagram shows cartel's revenue from the sale of the additional quantity of output. Cartel's MC curve is the horizontal summation of the marginal cost curves of the firms A and B. The equilibrium of the oligopolistic industry is denoted by E, where $MC = MR$. The equilibrium force is QP and the equilibrium total output is OQ. Having decided the total output to be produced equal to OQ the cartel allots the output quota to each member firm so that the marginal cost of each firm is the same. This can be determined by drawing a horizontal straight line from E towards the Y-axis. The firm A produces OQ_1 output and the firm B produces OQ_2 output. The total output OQ is equal to $OQ_1 + OQ_2$.

In brief OP price and OQ output ensure joining profits to the members of the cartel or industry.

Q28. Write about the price leadership model of oligopoly.**Ans :**

According to price leadership model of oligopoly, the leader firm in the market determines the price of the product. The firm which acts as the leader firm is one which is either a low-cost firm, dominant firm or experienced and respected firm. Accordingly, the most common types of leadership are as follows.

- (i) Price leadership by a low-cost firm
- (ii) Price leadership by a large (dominant) firm
- (iii) Barometric leadership (experienced and respected firm).

Kinds of Price Leadership

Three kinds of price leadership are commonly distinguished in the literature,

1. Dominant-firm price leadership
2. Collusive price leadership and
3. Barometric price leadership.

1. Dominant-firm Price Leadership

This model rests on the assumption that the oligopoly industry is composed of one large firm together with many small firms. The large firm is the dominant firm which, if it desires, can drive out its rivals by a price war. To avoid any such possibility, a tacit collusion may be arrived at between the dominant firm and the small firms. This collusion may occur in the form of price leadership by the dominant firm. The dominant firm fixes the price and the small firms act as price-takers. This type of price leadership is also called partial monopoly, as the dominant firm wields more or less monopoly power. Since the small firms can sell any amount of output at the price determined by the leader, each small firm in the industry therefore behaves like a perfectly competitive firm. The dominant firm, on the other hand, supplies the remainder of the market which is not satisfied by the small firms. Thus, although the dominant firm is a price leader, it is a quantity follower.

Determination of profit-maximizing price in this case is shown in figure where D_m is the market demand curve. Since the leader is assumed to have complete knowledge of the supply conditions of the small firms, S_{cf} is the supply curve of the small competitive firms as perceived by the leader. S_{cf} equals the sum of the individual marginal cost curves (portions of MC above the average variable cost curves) of the small firms. At price P_1 the supply of small firms (P_1N) equals the market demand. In other words, the dominant firm would sell nothing at P_1 price. At P_2 price, P_2B is supplied by small firms and BM by the dominant firm. If on the horizontal line P_2M we mark a distance P_2C equal to the share of the dominant firm (i.e., BM), we get a point C on dominant firm's demand curve. In a similar way we may mark the share of the dominant firm at each price and can get a set of points falling on the dominant firm's demand curve (e.g., Point H at price P_3). By joining points like P_1 , C , H , etc., we get the dominant firm's demand curve (AR_d). We can then find the corresponding MR_d curve for the dominant firm.

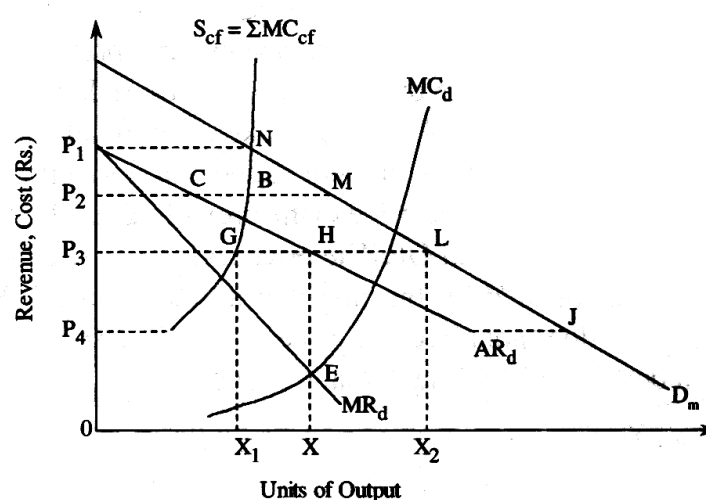


Fig.: Dominant-firm Price Leadership

Note that at price below P_A small firms do not supply at all, as they would not be able to cover their average variable cost - JD_m portion of the market demand is therefore relevant only to the dominant firm. Thus, the dominant firm's demand curve is the line $P_1 AR_d JD_m$ and the corresponding marginal revenue curve is MR_d .

The dominant firm will maximize its profits where its marginal cost (MC_d) equals its marginal revenue (MR_d). In figure, $MC_d = MR_d$ at point E where equilibrium price of the dominant firm is P_3 . The small firm's supply curve shows that at P_3 price they supply P_3G , leaving G_L quantity for the dominant firm to supply.

This situation is essentially one of unstable equilibrium. If the price set by the dominant firm gives profits to small firms in the industry, entry will be encouraged leading to reduction in the share of the dominant firm. If the dominant firm on the other hand, deviates from the pattern of 'leadership in price and followership in quantity' and changes its objective to long-run profits instead of short run profits, the dominant firm on the other hand, deviates from the pattern of 'leadership in price and followership in quantity' and changes its objective to long-run profits instead of short run profits, the dominant firm will then resort to price cutting which will enable it to put many a small firms out of business, thus enjoying near-monopoly share of the market.

2. Collusive Price Leadership

This is also known as price leadership by the efficient firm. Here, firms with relatively higher costs fear that the competition with the efficient firm will result in price war which may result in the erosion of their market share, and may eliminate them in the long run if the price fell lower than the average cost. In figure, A and B are two firms where firm A is more efficient because of its lower cost. The market demand curve is D. If the two firms agree to split the market equally, each firm faces demand curve d (the curve d shows one-half as much quantity as does demand curve D at each price).

The firm with the lowest cost will charge P_A price, which will be followed by B - the high-cost firm. Each of the firms sells Q_A quantity, which is together equal to Q^* . Note that this price, quantity combination maximises profits for firm A but not for firm B. The profit maximising price-quantity combination for firm B would be P_B, Q_B . But firm B will have to be content with price P_A , since if it charges P_B price it would lose customers to firm A. Thus, firm A (the leader) sets the price and firm B (the follower) adopts it. But this price leadership is maintainable only if the follower supplies exactly his quota-share of output (here, half of the total output). Thus, share-of-the market agreements are an integral part of low-cost price leadership.

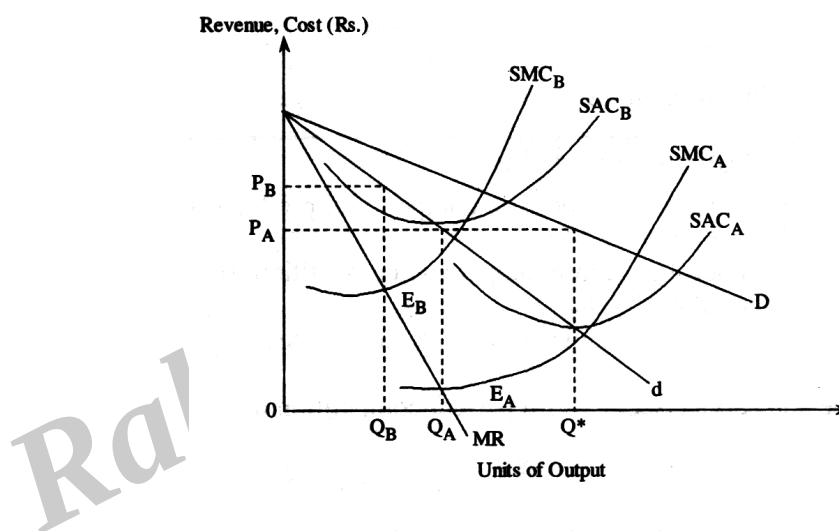


Fig.: Low-cost Price Leader

3. Barometric Price Leadership

Barometric price leadership gets its name from the fact that one firm acts as a 'barometer', reflecting changing market conditions or costs of production that require a change in price. It might be possible that the firm with a large share of the market or a low cost firm finds difficulties in playing 'careful' role in the price manoeuvres. Or, the government regulations like MRTP Act, etc., come in the way of its playing the role of a dominant firm. In such a case, the leadership role may fall to the share of a smaller firm. This firm may not be the lowest cost firm but it certainly must be an efficient firm. In spite of its market share being not the highest it is followed by other firms. Others in the industry recognize that the barometric firm is in the best position to judge the changes in demand and cost conditions and that its price change is in the best interest of the group. Since the barometric leader has very little power to impose his decisions on other firms in the industry, his leadership may thus be short lived. The barometric price leadership may, therefore, move from one firm to another, or at the worst the price parallelism may even break down.

Q29. Explain the differences between perfect competition and monopolistic competition.

Ans :

(Imp.)

The differences between perfect competition and monopolistic competition are as follows:

S.No.	Perfect Competition	Monopolistic Competition
1.	All firms existing in the market produce homogenous products	Each firm in the market produce a differentiated product.
2.	In perfect competition, firms are free to enter and exit from the market. There are no entry barriers.	In monopolistic competition, product differentiation acts as an entry barrier.
3.	There is uniform pricing in the market. The prices are low in perfect competition than compared to monopolistic competition.	"Firms follow price policy. Firms act as a price taker and adjusts their output according to the price. The prices generally are higher in monopolistic competition than in perfect competition.
4.	In perfect competition the buyers and sellers should have knowledge about current situations and future market conditions.	In monopolistic competition, buyers and sellers have no perfect knowledge.
5.	The nature of decision depends only on output.	The nature of decision depends on various variables like the nature and extent of product differentiation, level of selling expenses and advertisement.
6.	Advertising is not necessary in perfect competition.	Advertising is necessary to sustain in the market in monopolistic competition.
7.	Firms under perfect competition face extremely high degree of competition.	"Firms under monopolistic competition faces keen competition, two-dimensional competition, price competition along with non-price competition. (Non-price competition include sales and product variations).
8.	Perfect competition includes large number of small buyers as well as large number of small sellers, so that price would not get effected with a single buyer or a single seller. And all buyers and sellers are price-takers.	Monopolistic competition possess large number of sellers. Decisions with regard to price fixations are taken individually by each firm. Hence, prices differ from firm-to-firm. In monopolistic competition, sellers are price-makers.

Q30. Distinguish between Oligopoly Vs Monopolistic Competition.

Ans :

(Imp.)

The following table shows the comparison between oligopoly and monopolistic competition.

S.No.	Nature	Oligopoly	Monopolistic Competition
1.	Number of competitors	Only few competitors exist in oligopoly	Huge number of competitors exist in monopolistic competition.
2.	Entry and exit condition	Huge number of entry and exit barriers is one of the characteristic feature of oligopoly business. These barriers arise because of the factors like economics of scale, advertising, capital requirements and research and development costs.	Monopolistic competition is free from barriers. Entry into and exit from monopolistic competition is easy.
3.	Capability to earn profit	In case of oligopoly, economic profits can be earned in the long-run as well as short-run.	In case of monopolistic competition, economic profits can be earned only in the short-run whereas normal profits can be earned in the long-run.
4.	Examples	Soft drinks, pharmaceuticals, automobiles, etc., can be taken as examples of oligopoly.	Restaurants, garments, professional services etc., can be taken as examples of monopolistic competition.

Short Question and Answers

1. Define market.

Ans :

Meaning

The term "market" refers to a particular place where goods are purchased and sold. But, in economics, market is used in a wide perspective. In economics, the term "market" does not mean a particular place but the whole area where the buyers and sellers of a product are spread.

Definitions

- (i) **According to Prof. R. Chapman**, "The term market refers not necessarily to a place but always to a commodity and the buyers and sellers who are in direct competition with one another".
- (ii) **According to A.A. Cournot**, "Economists understand by the term 'market', not any particular place in which things are bought and sold but the whole of any region in which buyers and sellers are in such free intercourse with one another that the price of the same goods tends to equality, easily and quickly".
- (iii) **According to Benham**, "Any area over which buyers and sellers are in such close touch with one another, either directly or through dealers, that the prices obtainable in one part of the market affect the prices paid on other parts".

2. Market structure.

Ans :

Meaning

Market structure is a set of market characteristics that determine the nature of market in which a firm operates. It refers to economically significant features of a market, which affects the behaviour and working of firm in the industry.

Definition

- (i) **According to Pappas and Hirschey**, "Market structure refers to the number and size distribution of buyers and sellers in the market for a goods or services".

3. Perfect Competition.

Ans :

Meaning

A perfectly competitive market is one in which the number of buyers and sellers is very large, all engaged in buying and selling a homogeneous product without any artificial restrictions and possessing perfect knowledge of market at a time, e.g., fruit and vegetable market.

Definitions

- (i) **According to A. Koutsoyiannis**, "Perfect competition is a market structure characterised by a complete absence of rivalry among the individual firms".
- (ii) **According to R.G. Lipsey**, "Perfect competition is a market structure in which all firms in an industry are price-takers and in which there is freedom of entry into, and exit from, industry".

4. Advantages of perfect competition.

Ans :

(i) Consumer Sovereignty

There is consumer sovereignty in a perfect competitive market. The consumer is rational and he has perfect knowledge about the market conditions. Therefore, he will not purchase the products at a higher price.

(ii) Beneficial to Consumers

In the perfectly competitive market, the price is equal to the minimum average cost. It is beneficial to the consumer.

(iii) Cost-Saving

The perfectly competitive firms are price-takers and the products are homogeneous. Therefore it is not necessary for the producers to incur expenditure on advertisement to promote sales. This reduces the wastage of resources.

(iv) Economic Efficiency

In the long-run, the perfectly competitive firm is functioning at the optimum level. This means that maximum economic efficiency in production is achieved. As the actual output produced by the firm is equal to the optimum output, there is no idle or unused or excess capacity.

5. What is Monopoly?

Ans :

Monopoly as a form of market structure has come to emerge in all the capitalist economies. The perfect competitive structure of markets in capitalist economies now ceases to exist. It is for this reason that the capitalism has assumed the form of monopoly capitalism. In fact, monopoly is an extreme form of imperfect competition. Pure monopoly is never found in practice.

Monopoly form of market is most commonly found in public utility services such as transport, water and electricity supply. If a private entrepreneur monopolises the production or distribution of a product, it is called private monopoly. The monopolization of the production or supply of a product by the government enterprise is called public monopoly.

6. Advantages of monopoly.

Ans :

(i) Research and Development

Supernormal Profit can be used to fund high cost capital investment spending. Successful research can be used for improved products and lower costs in the long term.

Example: Telecommunications and Pharmaceuticals.

(ii) Economies of Scale

Monopolies can produce at lower costs which makes them more efficient than smaller firms. This in turn increases output which leads to a decrease in average costs of production. These can be passed on to consumers in the form of lower prices.

(iii) Competition for Corporate Control

Monopolists are subject to the discipline of the financial markets. If a monopoly, with potentially low costs, fails to perform, then it may be a subject to takeover bid.

7. What is Price Discrimination?

Ans :

Meaning

A monopoly firm which makes use of the price discrimination policy is termed as discriminating monopoly. Price discrimination indicates the act of selling the output of the same product at different prices to different buyers or in different markets.

In a wider sense, price discrimination takes place in two ways i.e.,

- (i) By charging different prices for same product.
- (ii) By not fixing the prices of different varieties of products or different products related to their cost differences. But in the theory of discriminating monopolies, for simplicity and convenience, the meaning of price discrimination is restricted only to charging of different prices for the same product to different buyers or in different markets.

8. What is monopolistic competition?

Ans :

Meaning

Monopolistic competition refers to a market situation where there are many firms selling a differentiated product. "There is competition which is keen, though not perfect, among many firms making very similar products". No firm can have any perceptible influence on the price-output policies of the other sellers nor can it be influenced much by their actions. Thus, monopolistic competition refers to competition among a large number of

sellers producing close but not perfect substitutes for each other.

Definitions

- (i) **According to J.S. Bains**, "Monopolistic competition is market structure where there is a long number of small sellers, selling differentiated but close substitute products".
- (ii) **According to Baumoul**, "The term monopolistic competition refers to the market structure in which the sellers do have a monopoly (they are the only sellers) of their own product, but they are also subject to substantial competitive pressures from sellers of substitute product".

9. Disadvantages of Monopolistic Competition.

Ans :

Following are the disadvantages of competition:

(i) Liable of Excess Capacity

A negative factor of firms that are in monopolistic competition is that they do not produce enough output to efficiently lower the average cost and benefit from economies of scale. They are reducing their 'economic profits', as a result of the marginal revenue being less than that of the marginal cost. Moreover, the funding and expense that goes into packaging, marketing and advertising can be deemed extremely wasteful on some levels.

(ii) Allocatively Inefficient

Compared with perfect competition, it can be shown that such firms that there is an element of allocation efficiency as the price is above that of the marginal cost curve - less so in the long-run, due to more competition. As the demand curve is one which is downward sloping this then implies the price has to be greater than the marginal cost for a monopolistically competitive firm. Hence it is allocatively inefficient as not enough of the product gets produced for society to benefit - they want more, however this would force the company to lose money.

(iii) Higher Prices

Another drawback of a monopolistic competition is that as a result of firms having 'some market power', they can extenuate a mark-up on the marginal cost of revenue. Compared to a perfectly competitive firm, who have their price equal to their marginal cost. This would be difficult for a governmental authority to regulate for two reasons:

10. Define Oligopoly.

Ans :

Meaning

Oligopoly is a situation where a few large firms compete against each other and there is an element of interdependence in the decision-making of these firms. Each firm in the oligopoly recognises this interdependence. Any decision one firm makes (be it on price, product or promotion) will affect the trade of the competitors and so results in countermoves. As a result, one's competitor's behaviour depends on one's own behaviour, and this must be taken account of when decisions are made. A major policy change on the part of one firm will have obvious and immediate effects on its competitors.

Definitions

- (i) **According to P.C. Dooley**, "An oligopoly is a market of only a few sellers, offering either homogenous or differentiated products. There are so few sellers that they recognise their mutual dependence."
- (ii) **According to Mansfield**, "Oligopoly is a market structure characterized by a small number of firms and a great deal of interdependence."
- (iii) **According to Grinols**, "An oligopoly is a market situation in which each of a small number of interdependent, competing producers influences but does not control the market".
- (iv) **According to Mc Connell**, "Oligopoly is a market situation in which number of firms in an industry is, so small that each must consider the reactions of rivals in formulating its price policy."

Choose the Correct Answer

1. Which of the following statements highlights one of the essential conditions of perfect competition? [c]
 - (a) A perfect competition has a number of sellers and a few buyers
 - (b) A perfect competition has different levels of pricing for identical products at a particular point of time
 - (c) A perfect competition has the same pricing for identical products at a particular point of time
 - (d) None of the above
2. Which of the following institutes recommends the minimum support price in India? [c]
 - (a) The minimum support price is recommended by the Ministry of Food and Agriculture
 - (b) The minimum support price is recommended by the Food Corporation of India
 - (b) The minimum support price is recommended by the Commission of Agricultural Costs and Prices
 - (d) The minimum support price is recommended by the Food and Agriculture Organisation
3. Which of the following statements about Duopoly is correct? [a]
 - (a) Duopoly is a special case for the Oligopoly market structure
 - (b) Duopoly is a special case for the Monopsony market structure
 - (c) Duopoly is a special case for the Monopoly market structure
 - (d) Duopoly is a special case for the Imperfect Competition
4. Which of the following statements about the Indian Economy is correct? [c]
 - (a) India follows the Capitalist economic structure
 - (b) India follows the Socialist economic structure
 - (c) India follows the Mixed economic structure
 - (d) None of the above
5. Which of the following statements about the demand curve of a firm under monopoly is true? [b]
 - (a) The demand curve of a firm under monopoly has a positive relationship between demand and price
 - (b) The demand curve of a firm under monopoly has an inverse relationship between demand and price
 - (c) The demand curve of a firm under monopoly has no relationship between demand and price
 - (d) None of the above
6. Which of the following statements is correct? [c]
 - (a) The process of charging different prices from different consumers for the same product is called price extension
 - (b) The process of charging different prices from different consumers for the same product is called price control
 - (c) The process of charging different prices from different consumers for the same product is called price discrimination
 - (d) None of the above

7. Which of the following statements is true about the average revenue curve? [a]
- (a) The average revenue curve is shaped as a horizontal straight line in a perfect competition
 - (b) The average revenue curve is shaped as a vertical straight line in a perfect competition
 - (c) The average revenue curve is shaped downward to the right in a perfect competition
 - (d) The average revenue curve is shaped rectangular hyperbola in a perfect competition
8. Which of the following statements is accurate? [b]
- (a) Under the perfect competition, the marginal revenue and average revenue are indicated by a common rectangular hyperbola
 - (b) Under the perfect competition, the marginal revenue and average revenue are indicated by a common horizontal straight line
 - (c) Under the perfect competition, the marginal revenue and average revenue are indicated by a common vertical straight line
 - (d) Under the perfect competition, the marginal revenue and average revenue are indicated by different lines that are sloping downward
9. Which of the following statements is correct? [d]
- (a) When compared to the monopolistic competition, the demand curve of a firm under monopoly is infinitely elastic
 - (b) When compared to the monopolistic competition, the demand curve of a firm under monopoly is more elastic
 - (c) Compared to the monopolistic competition, the demand curve of a firm under monopoly is equally elastic
 - (d) When compared to the monopolistic competition, the demand curve of a firm under monopoly is less elastic
10. Which of the following statements about monopolistic competition is true? [c]
- (a) The products sold under monopolistic competition are homogenous
 - (b) The products sold under monopolistic competition are differentiated
 - (c) The products sold under monopolistic competition are homogenous but supported with advertisements
 - (d) The products sold under monopolistic competition are differentiated but supported with advertisements

Fill in the blanks

1. The term _____ refers to a particular place where goods are purchased and sold.
2. _____ markets refer to the markets which are related to local areas.
3. The market in which the goods are demanded and sold nationally is called as _____ market.
4. _____ structure is a set of market characteristics that determine the nature of market in which a firm operates.
5. _____ as a form of market structure has come to emerge in all the capitalist economies.
6. If the monopoly firm charges the same price from all its clients, it is called _____ monopoly.
7. If the monopoly firm charges different prices from different sets of clients, it is called _____ monopoly.
8. _____ indicates the act of selling the output of the same product at different prices to different buyers or in different markets.
9. _____ competition refers to a market situation where there are many firms selling a differentiated product.
10. _____ is situation where a few large firms compete against each other and there is an element of interdependence in the decision-making of these firms.

ANSWERS

1. Market
2. Local
3. National
4. Market
5. Monopoly
6. Simple
7. Discriminating
8. Price discrimination
9. Monopolistic
10. Oligopoly

UNIT IV

INDIAN BUSINESS ENVIRONMENT – LPG :

Business Environment - Concept - Economic Planning - NITI Aayog - Liberalisation - Economic Reforms (Second Generation Reforms) Concept of Privatisation - Forms of Privatisation - Privatisation in India (Impact & Issues) Globalisation - Meaning - Drivers - Modes of Entry

4.1 BUSINESS ENVIRONMENT

4.1.1 Concept

Q1. Explain the concept of Business Environment.

Ans :

Meaning

Environment refers to all external forces which affect the functioning of business. Environment factors are largely, if not totally, external and beyond the control of individual industrial enterprises and their managements. The surrounding in which business operates is called business environment.

The word 'Business Environment' has been defined by various authors as follows:

Definitions

- i) **According to Keith Davis**, Business environment is the aggregate of all conditions, events and influences that surround and affect it.
- ii) **According to Reinecke and Schoell**, the environment of business consists of all those external things to which it is exposed and by which it may be influenced directly or indirectly.

These definitions give a clear understanding of the business environment. We can say that business environment is a combination or mixture of complex, dynamic and uncontrollable external factors within which a business is to be operated.

The change in tastes and preferences of customers, introduction of new technologies, innovations, government policies, etc., all are parts of the business environment. Business needs to accept and adapt these changes promptly to survive in the market. So, it is necessary for the business to analyse the business environment.

Q2. Explain the nature and scope of business environment.

Ans :

Nature

The business environment of an organisation usually poses threats as well as opportunities. To grasp the opportunities and reduce the threat, it is important to know the nature of business environment.

Following are some points which describe nature of business environment:

- **Internal and external environment:** Every business is surrounded by internal and external environment. Internal environment can be controlled by an organisation, like men, money, material, machine and method, whereas external environment is uncontrollable like political conditions, technologies, legal regulations, etc.
- **Dynamic and ever-changing:** Business environment keeps on changing frequently in terms of technologies, government rules and regulations, socio-economic conditions, etc., which make business dynamic.
- **Complexity of the environment:** Business environment cannot be easily analysed because of too much complexity involved. Environment consists of a number of factors, events, conditions and influences, generating from different sources which impact business, thus, making the business complex.
- **Inter-relatedness:** Factors of business environment are related to each other. For example, change in political parties will result

in changing the government rules, fiscal policies, market conditions, technology, etc. So, all these factors need to be scanned properly because these factors are inter-related to each other.

- **Uncertainty:** It is difficult to predict the changes going to take place in future because environment keeps on changing. These changes are uncontrollable. So, business can only try to combat from these challenges. For example, in case of fashion industries, changes take place so frequently, economy could collapse any time.
- **Impact:** Impact means the effect of environment on business. Business environment has both long-term and short-term impacts on business. For example, different firms may get influenced differently from change in monetary policy.
- **Inter-dependence:** A business firm and its environment are mutually interdependent. The economic status of a country affects the development of technology or it may change the lifestyle of people.

Scope

The aspects which fall under business environment are as follows:

- **Internal and external environment:** Internal environment includes all those factors that are within an organisation and impart strength or cause weakness in business. For example, inefficient human resource, superior raw material, etc.

External environment includes those factors which are beyond the control of business and are outside the organisation. They provide opportunities and pose threat to business. For example, change in political conditions, technological change, etc.
- **Specific and general environment:** Specific environment includes external forces that directly impact or influence organisations' decisions and actions and are directly relevant to the achievement of organisations' goals. The main forces that make up the specific environment are customers, suppliers, competitors and pressure groups.

General environment includes the economic, political/legal, socio-cultural, demographic, technological and global conditions that affect organisations. External forces do not affect organisations to a great extent, but organisations must plan, organise, lead and control their activities taking into account these factors.

- **Micro environment and macro environment:** Micro environment impacts the working of a particular business. It has direct impact on business activities. It includes customers, suppliers, market intermediaries, competitors, etc. These factors are controllable to some extent.

Macro environment is general environment that impacts the working of all businesses. It is uncontrollable and influences indirectly. Political conditions, economy, technology, etc., come under macro environment.

- **Controllable and uncontrollable environment:** All those factors which are governed by business come under controllable environment. Internal factors are treated as controllable factors, like men, material, machine, money, etc.

Uncontrollable factors are external and are beyond the control of business like technological change and law related change.

Q3. Describe the importance of business environment.

Ans :

Following points describe the importance of business environment:

- **Identification of business opportunities:** Many opportunities are provided by business environment to the organisation. Scanning business environment would help business get the first mover advantage. If changes are analysed carefully, then they can be the reason for business success.
- **Optimum utilization of resources:** Resources like raw material, machine, money, labour, etc., are input for business. All these inputs are provided by environment to the business firms for carrying out their activities and also expect something in return.

- **Identification of threat and early warning signal:** Business can recognise the threat by analysing the change taking place in the environment. For example, if any new multinational company is entering the Indian market, the manager of an Indian firm dealing with same product as that of the multinational company should take it as a warning signal. Before the MNC launches its product, the manager should implement measures, such as improving the quality of his product and heavy advertisement.
- **Coping with the rapid changes:** To efficiently cope with these changes, managers must understand the environment and should adopt appropriate courses of action at the right time. It helps management become more sensitive to ever-changing needs of customers. As a result, they are able to respond to such changes effectively.
- **Meeting competition:** This helps firms analyse competitors' strategies and formulate their strategies accordingly.
- **Identifying firm's strength and weakness:** Business environment helps identify tire individual strength and weakness in view of the technological and global developments.
- **Assisting in planning and policy formulation:** Business environment brings both threats and opportunities to a business. Having a good understanding of tire business environment can immensely help an organisation's management in their future planning and decision-making endeavours. For example, competition increases with the entry of new firms in the market.

The management has to draft new plans and policies to deal with new competitors. Environmental awareness provides intellectual stimulation to planners in their decision making. They can make changes in their plans efficiently and effectively.

Q4. State the components of business environment.

Ans :

(Imp.)

The performance of an organisation is affected by the business environment. It has a far-reaching impact on its survival, profit and growth. There are certain forces inside and outside the organisation. These forces affect the business both in positive and negative ways.

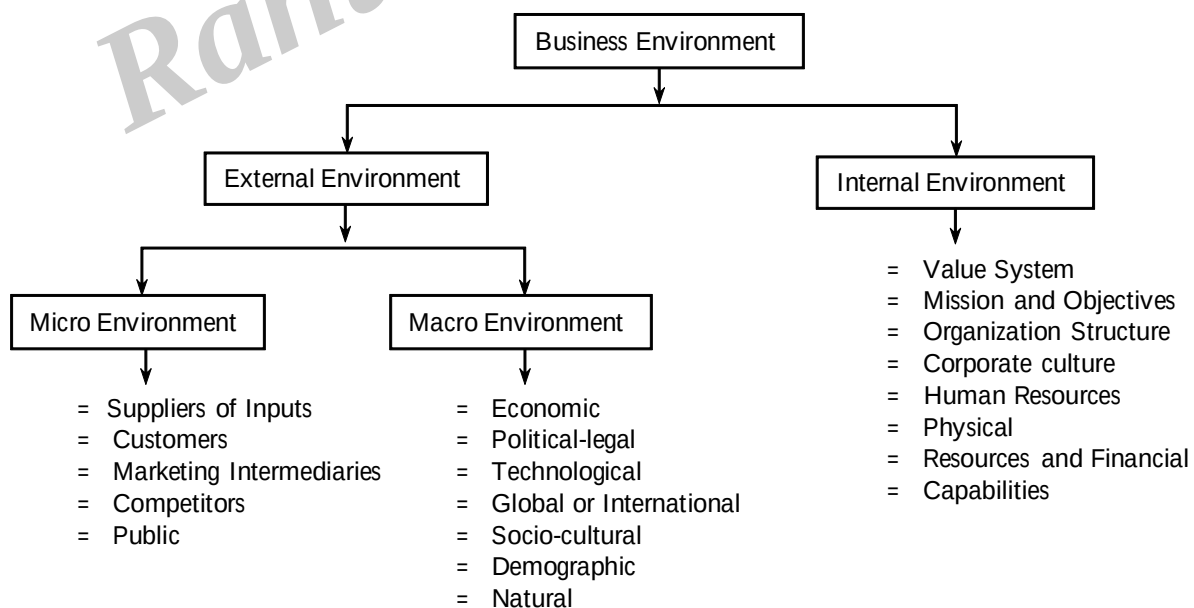


Figure: Displays Components of Business Environment

Various components of business environment are as follows:

I) Internal environment

These are those factors or conditions that exist within an organisation and affect its performance. These factors are controllable in nature and organisation can try to change or modify these factors. Organisation's resources like men, material, money, method and machine come under internal environment. Various internal factors are as follows:

- i) Value System:** The values are the ethical beliefs that guide the organisation in achieving its mission and objectives. It is framed by top-level managers like board of directors. The extent to which the value system is shared by all in the organisation is an important factor contributing to its success.
- ii) Mission and objectives:** The objective is the end towards which business activities are directed. All businesses focus on maximization of profit.

Mission is defined as the overall purpose or reason for its existence. A mission guides and influences an organisation's decisions and economic activities. An organisation can change or modify its mission and objective accordingly.
- iii) Organisation structure:** The organizational structure is the hierarchy in business that define roles, responsibilities and supervision. The composition of the board of directors, the professionalism of management, etc., come under organisation structure and are important factors influencing business decisions. For efficient working of a business organisation and to facilitate prompt decision making, the organisation structure should be conducive.
- iv) Corporate culture:** Shared values and belief in an organisation which determine its internal environment are called corporate culture. Organisation where there is strict supervision and control results in lack of flexibility and unsatisfied employees. The sets of values that help members understand what organisation stands for how it does work, what it considers, cultural values of business forces of business, and so on. It helps in direction of activities.

v) Human resources: Human quality of a firm is an important factor of internal environment. Skills, qualities, capabilities, attitude, competencies and commitment of its employees, etc., could contribute to the strengths and weaknesses of an organisation. Organisations may find it difficult to carry out modernisation and redesigning because of resistance by its employees.

vi) Physical resources and financial capabilities: Physical resources, such as plant and equipment, facilities and financial capabilities of a firm determine its competitive strength which is an important factor for determining its efficiency and unit cost of production. Also research and development capabilities of a company determine its ability to introduce innovations which enhance the productivity of workers. Financial capabilities are company's source of fund generation.

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II) External environment: These are those factors and the conditions which are outside the organisation and affect the performance of business. External factors are further divided into micro environment and macro environment which are as follows:

1. **Micro environment:** Those factors which have direct impact on business. Various constituents under micro environment are as follows:
 - i) **Suppliers of inputs:** Various suppliers of inputs are important factors in the external micro environment of a firm. Suppliers provide raw material and resources to the firm. A firm should have more than one supplier for proper inflow of inputs.
 - ii) **Customers:** They are the buyers of firm's products and services. Customers are an important part of external micro environment because sales of a product or service are critical for a firm's survival and growth, so it is necessary to keep the customers satisfied.
 - iii) **Marketing intermediaries:** Intermediaries play an essential role of selling and distributing its products to the final customers. Marketing intermediaries are an important link between a business firm and its ultimate customers. Retailers and wholesalers buy in bulk and sell business products and services to the ultimate consumer.
 - iv) **Competitors:** Competitors are the rivalry in business. Competition can be based on pricing of products or based on competitive advertising. For example, organisations may sponsor some events to promote the sale of different varieties and models of their products. Business formulates strategies after analysing their competitor.
 - v) **Public:** Public or groups, such as environmentalists, media groups, women's associations, consumer protection groups, are important factors in external micro environment. Public, according to Philip Kotler, is any group that has an actual or potential interest in or impact on the company's ability to achieve its objective.
2. **Macro Environment:** These are the factors or conditions which are general to all businesses and are uncontrollable. Because of the uncontrollable nature of macro forces, a firm needs to adjust or adapt it to these external forces. These factors are as follows:
 - i) **Economic environment:** All those forces which have an economic impact on businesses are called economic environment. It includes agriculture, industrial production, infrastructure, and planning, basic economic philosophy, stages of economic development, trade cycles, national income, per capita income, savings, money, etc., For example, low per capita income will negatively impact business because people have less money to spend.
 - ii) **Political legal environment:** The activities of legislature, executive and judiciary play a vital role in shaping, directing, developing and controlling business activities. Rules and regulations, framed by the government, like licensing policy, polythene ban, etc., affect the business. Business growth can be achieved by using a stable and dynamic political-legal environment.
 - iii) **Technological environment:** Systematic application of scientific or other organised knowledge to practical tasks or activities is called technology. As it is changing fast, businessmen should keep a close look on those technological changes for its adaptation in their business activities.
 - iv) **Global or international environment:** The global environment is also important for shaping business activity, for the era of globalisation, whole world is a market. Business analyses international environment to cope up with the changes.
 - v) **Socio-cultural environment:** People's attitude towards work and wealth, lifestyle, ethical issues, role of family, marriage, religion and education and also social responsiveness of business affect the business.

- vi) **Demographic environment:** Population size and growth, life expectancy of the people, rural-urban distribution of population, the technological skills and educational levels of labour force come under demographic environment. These features also affect the functioning of organisations.
- vii) **Natural environment:** The natural environment plays an important role as it provides raw materials and energy for production in a firm. Natural environment consists of geographical and ecological factors such as minerals and oil reserves, water and forest resources, weather and climatic conditions and port facilities. These are very important for many business activities. For example, in places where temperatures are high, the demand for coolers and air conditioners is high. Also, demand for clothes and building materials depends on weather and climatic conditions. Natural calamities like floods, droughts, earthquakes, etc., immensely affect business activities.

4.2 ECONOMIC PLANNING

Q5. Define Economic planning. What are the objectives of economic planning.

Ans :

(Imp.)

Meaning

Economic planning is a term used to describe the long-term plans of an incumbent government to coordinate and develop the economy. Economic planning is commonly a feature of big government as it usually involves increased spending on things such as public work schemes and government programmes. Economic planning is the process by which key economic decisions are made or influenced by central governments. It contrasts with the laissez-faire approach that, in its purest form, avoids any attempt to guide the economy, relying instead on market forces to determine the speed, direction, and nature of economic evolution.

The government has to prepare and implement a comprehensive economic plan integrating the private sector with the public sector. It is for these reasons that we have been having economic planning since 1951 when the First Five Year Plan was launched.

Economic planning is defined as “the making of major economic decisions - what and how much is to be produced, how, when, and where it is to be produced and to whom it is to be allocated by the conscious decision of a determinate authority on the basis of a comprehensive survey of the economic system as a whole”.

Definitions

- (i) **According to Dickinson**, “Economic planning is the making of all major economic decisions by conscious decisions of comprehensive survey of the economic system as a whole”.
- (ii) **According to the Indian Planning Commission**, “Economics planning is, essentially a way of organizing and utilizing resources to maximum advantage in terms of defined social ends”.
- (iii) **According to Fedynand Zweig**, “Economic planning in this sense would mean drawing-up economic schemes with foresight and on a large scale it may be called planning within the economy”.
- (iv) **According to Prof. Lews Lordwin**, “Planned economy is a scheme of economic organization in which individual and separate plants, enterprise of industries are treated as coordinated units of one single system for the purposes of utilizing available resources to achieve the maximum satisfaction of the people's needs with in given time”.

Objectives

Planning without an objective is like driving without any destination. The long-term objectives of economic planning are as follows:

1. High Rate of Growth

All the Indian Five Year Plans have given primary importance to higher growth of real national income. During the British rule, Indian economy was stagnant and the people were living in a state of abject poverty. The Britisher's exploited the economy both through foreign trade and colonial administration. While the European industries flourished, the Indian economy was caught in a vicious circle of poverty. The pervasive poverty and misery were the most important problem that has to be tackled through Five Year Plan.

2. Raising Investment Income Ratio

Achieving a planned rate of investment within a given period to bring the actual investment as proportion of national income to a higher level has been regarded significant due to two reasons. Firstly, such an increase in output capacity is deemed to be needed to increase the output. Secondly it is needed to bring the capital stock of the economy to ensure the growth of future output capacity.

3. Removal of Poverty

Up to the end of the Fourth Five Year Plan, it was felt that the benefits of development have received a raw deal to tackle the problem of poverty. In the Fifth Plan, there was a visible shift in the approach which resulted in the Minimum Needs Programme. Earlier to it, there was 20 Point Economic Programme to uplift village community, The Sixth Plan (1980-85) document mentioned that the incidence of poverty in the country is still very high and necessary measures need to be adopted to combat poverty. Similarly, seventh, Eighth and Ninth Plan Stressed for the removal of poverty in the country.

4. Full Employment

Unemployment problem is a chronic problem in undeveloped countries. Though, India has emerged as a new developing country, yet it is in the grip of acute problem of disguised unemployment. Thus, the crucial objective of Indian Planning is the creation

of conditions for attaining full employment and the elimination of unemployment, underemployment and disguised unemployment.

5. Alleviating Three Main Bottlenecks

Another objective of planning is the adoption of various measures to alleviate the three 'bottlenecks' viz., agricultural production, the manufacturing capacity for producer goods and the balance of payments. The various plans have in one way or other been concerned with the removal of these three principal barriers for achieving stability-both internal and external in the economy.

6. Economic Self Reliance

Self reliance means to stand on one's own legs. In the Indian context, it implies that dependence on foreign aid should be as minimum as possible. At the beginning of planning, we had to import food grains from USA to meet our domestic demand. Similarly, for accelerating the process of industrialization, we had to import, capital goods in the form of heavy machinery and technical know-how. For improving infrastructure facilities like roads, railways, power, we had to depend on foreign aid to raise the rate of our investment.

7. Social Justice

Social justice means to equitably distribute the wealth and income of the country among different sections of the society. In India, we find that a large number of people are poor; while few lead a luxurious life. Therefore, another objective of development is to ensure social justice and to take care of the poor and weaker sections of the society. The Five-Year Plans have highlighted four aspects of social justice.

They are:

- i) Application of democratic principles in the political structure of the country;
- ii) Establishment of social and economic equity and removal of regional disparity;

- iii) Putting an end to the process of centralization of economic power; and
- iv) Efforts to raise the condition of backward and depressed classes.

Thus the Five Year Plans have targeted to uplift the economic condition of socio-economically weaker sections like scheduled caste and tribes through a number of target oriented programmes. In order to reduce the inequality in the distribution of landed assets, land reforms have been adopted. Further, to reduce regional inequality specific programmes have been adopted for the backward areas of the country.

8. Modernization of the Economy

Before independence, our economy was backward and feudal in character. After attainment of independence, the planners and policy makers tried to modernize the economy by changing the structural and institutional set up of the country. Modernisation aims at improving the standard of living of the people by adopting a better scientific technique of production, by replacing the traditional backward ideas by logical reasoning's and bringing about changes in the rural structure and institutions.

These changes aim at increasing the share of industrial output in the national income, upgrading the quality of products and diversifying the Indian industries. Further, it also includes expansion of banking and non-banking financial institutions to agriculture and industry. It envisages modernisation of agriculture including land reforms.

9. Economic Stability

Economic stability means to control inflation and unemployment. After the Second Plan, the price level started increasing for a long period of time. Therefore, the planners have tried to stabilize the economy by properly controlling the rising trend of the price level. However, the progress in this direction has been far from satisfactory.

Thus the broad objective of economic plans has been a non-inflationary self-reliant growth with social justice.

Q6. What are the Merits and Limitations of Economic Planning?

Ans :

Merits

1. It promotes equality among consumers

Since the government controls all aspects of production, there will be no chance of monopoly to occur, which means that the gap between the rich and the poor will be reduced, as all government policies will be designed to bring about social equality.

2. It allows the government to monitor all aspects of economy

In a centrally planned economy, the government will be able to keep proper tabs on the supply, demand, prices and other aspects surrounding goods and services. It can also indirectly keep a watch on any signs of inflation that might occur.

3. It does not hinder economic projects to be carried out immediately

There will be no need to wait for private investments for particular projects to go underway, unlike in other economic systems, such as capitalism. Here, the government reigns supreme, which means that it can start and end a project that the country might require, such as infrastructures, health facilities and sanitation services.

Limitations

1. It is known to be inefficient in distributing resources

This economic system sees planners not being able to accurately predict shortages, surpluses and consumer preferences, which entails that they cannot also allocate resources efficiently. This would result in some areas having abundance of goods that cannot be sold and other areas experiencing shortages. On the other hand, a free market allocates resources based on the price system, making sure they will go where demand and supply are dictated.

2. It would go against some people's rights as consumers

Opponents say that this system will lead to dissent among citizens, as their basic right of free will is going to be challenged. This means that it will eventually lead to the citizens revolting against the government.

3. It suppresses economic freedom

It has been observed that a centrally planned economy can stifle economic freedom, as citizens would have no incentive to take entrepreneurial risks or innovate. As you can see, central planners suppress the profit motive by considering decisions from entrepreneurs and transferring them to the state. As economists believe, society functions best when the economy is guided by invisible hand, which rewards personal economic freedom, but central planning restricts this strategy.

4.3 NITI AAYOG

Q7. Explain the composition of NITI Aayog.

Ans :

NITI Aayog (or) National Institution for Transforming India Aayog is basically a policy think tank of Government of India and State Governments that replaces 65-year old Planning Commission. Union Government of India had announced formation of NITI Aayog on 1st January, 2015.

The NITI Aayog will have a governing council comprising all State Chief Ministers and Lt. Governors of Union Territories and will work towards fostering a 'Co-operative federalism' for providing a "national agenda" to the Centre and States.

The body is comprised of a CEO and a Vice Chairperson, to be appointed by the Prime Minister, in addition to some full-time members and two part-time members, while four Union Ministers would serve as ex-officio members. Besides, there would be specific regional councils, while experts and specialists from various fields would be called as special invitee nominated by the Prime Ministers.

NITI Aayog will serve as a "think tank" of the government as a "directional and policy dynamo" and would provide both to the governments at the centre and in the states with strategic and technical advice on key policy matters including economic issues of national and international importance.

Its primary job would be to undertake long term policy and design frameworks and take necessary initiatives for attaining faster development and finally to monitor these activities sincerely.

Thus, NITI Aayog will actively monitor and evaluate implementation of the Government programmes and initiatives. The Planning Ministry of present NDA Government is of the view that "with central plan expenditure of the order of Rs 5.75 lakh crore was being channelized per year for development, it was absolutely necessary that there is concurrent, comprehensive, credible and reliable evaluation".

This step mainly focuses on strategies to spread awareness about and use of evaluation as a tool for enhancing result from policies and programmes of good governance. So it was time to consider developing a National Evaluation Policy that would provide direction to Monitoring and Evaluation (M & E) activities in the country, laying stress upon quality standards and sound ethical procedures and provide for appropriate institutional mechanisms.

Q8. What are the objectives of NITI Aayog?

Ans : (Imp.)

1. NITI Aayog sets its aims to provide a critical directional and strategic input into the development process of the country.
2. NITI Aayog aims to serve as a "think tank" of the government both at central and state levels with relevant strategic and technical advice on key policy matters including economic issues of national and international importance.
3. NITI Aayog now seeks to replace the centre-to-state one way flow of policy framed by the Planning Commission by an amicable settled policy framed by a genuine and continuing partnership of states.

4. The NITI Aayog will also seek to put an end to slow and tardy implementation of policy by fostering better Inter-Ministry coordination and better centre-state co-ordination. It will help evolve a shared vision of national development priorities, and foster co-operative federalism, in order to focus on the view that strong states make a strong nation.
 5. The NITI Aayog has set its objectives to develop mechanisms to formulate credible plans to the village level and aggregate these progressively at higher levels of government. This Aayog will ensure special attention to the sections of society that may be at risk of not benefitting adequately from economic progress.
 6. The NITI Aayog will create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts, practitioners and partners. The Aayog will offer a platform for resolution of inter-sectoral and inter-departmental issues in order to accelerate the implementation of the development agenda.
 7. The NITI Aayog will monitor and evaluate the implementation of programmes, and focus on technology upgradation and capacity building.
- To develop mechanisms to formulate credible plans at the village level and aggregate these progressively at higher levels of government
 - To ensure, on areas that are specifically referred to it, that the interests of national security are incorporated in economic strategy and policy
 - To pay special attention to the sections of our society that may be at risk of not benefiting adequately from economic progress
 - To design strategic and long term policy and programme frameworks and initiatives, and monitor their progress and their efficacy. The lessons learnt through monitoring and feedback will be used for making innovative improvements, including necessary mid-course corrections
 - To provide advice and encourage partnerships between key stakeholders and national and international like-minded Think tanks, as well as educational and policy research institutions.
 - To create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts, practitioners and other partners.
 - To offer a platform for resolution of inter-sectoral and inter-departmental issues in order to accelerate the implementation of the development agenda.

Q9. What are the functions of NITI Aayog?

Ans : (Imp.)

The following are the functions of NITI Aayog.

- To evolve a shared vision of national development priorities sectors and strategies with the active involvement of States in the light of national objectives
- To foster cooperative federalism through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation.
- To maintain a state-of-the-art Resource Centre, be a repository of research on good governance and best practices in sustainable and equitable development as well as help their dissemination to stake-holders
- To actively monitor and evaluate the implementation of programmes and initiatives, including the identification of the needed resources so as to strengthen the probability of success and scope of delivery
- To focus on technology upgradation and capacity building for implementation of programmes and initiatives.

4.4 LIBERALISATION

Q10. Define Liberalization. Explain the nature of Liberalization.

Ans :

Meaning

Liberalization is a very broad term that usually refers to fewer government regulations and restrictions in the economy in exchange for greater participation of private entities.

Liberalization refers to the relaxation of the previous government restriction usually in area of social and economic policies. When government liberalized trade, it means it has removed the tariff, subsidies and other restriction on the flow of goods and services between the countries. Economic liberalization, in its modern form, usually describes internal economic reform such as deregulation and privatization and the removal of barriers to trade in services as well as the more conventional view of free trade as the removal of tariffs on physical imports.

Liberalization does not mean simply inviting a number of foreign companies or Multinational Corporations (MNCs) on whatever terms with whatever objectives in mind and in whatever sector, indiscriminately. By implication, economic liberalization suggests that the entire opening up of the economy should ultimately be for building up strength of its own. Hence, inviting foreign companies/MNCs should be a means and not an end. Liberalization means removal of control and not of regulations. Liberalization does not imply any secret deals behind the curtain. On the contrary, it does mean the elements of transparency and accountability in the functioning and procedures relating to the various sectors of the economy.

Definition

According to M. Dhanuja, liberalization is related to that state of economic conditions in which rules, regulations and controls are eliminated to promote competition.

Nature

The nature of liberalization is as follows:

1. Freedom in Fixing Prices

Liberalization involves freedom in deciding the scale of business activities and fixing prices of goods and services.

2. Reduction in Restrictions

It includes reduction in physical restrictions on imports and also in the rate of import duties. There is also reduction in controls on foreign exchange both current and capital account and in different tax rates of different industry.

3. Increase Competitiveness

Due to liberalization, various sectors of the Indian economy are made competitive on the global economic platform by making them produce quality goods in a cost-effective manner.

4. Reform of the Banking System

Banking sector reforms were kicked off in 1992 and have been continuing since then. Private banks, including foreign banks, have been allowed to operate and their reach is now extensive.

5. Increase of Foreign Investment

Liberalization simplified the policies to attract foreign capital and technology to India.

Q11. Explain the impact of Liberalization in India.

Ans :

(Imp.)

The main aim of liberalization was to dismantle the excessive regulatory framework which acted as a barrier for industries growth. Over the years the country had developed a system of "LICENCE PERMIT-RAJ". Major purpose of liberalization was to free the large private sector from the bureaucratic control if therefore started dismantling the industrial licensing and controls.

The positive and negative impact of liberalization in India is as follows:

1. Positive Impact of Liberalization in India

The positive impact of liberalization in India can be seen in following areas:

i) Improvement in Healthcare

Liberalization has also positively affected the overall healthcare situation in the country. More and more medical innovations are

coming which are improving the health situation in India. The infant mortality rate and the malnutrition rate have significantly come down since the last decade. All these factors clearly prove that the globalization helped to reduce the India's poverty level.

ii) **Growth of Agriculture**

A major portion of the poverty level in India is from the rural areas whose staple form of income is agriculture and farming. Due to the globalization, Indian agriculture has improved to some extent which has helped to reduce the poverty problems of the rural masses.

iii) **Liberalization and Employment**

Liberalization has also put a favourable effect on the employment scenario of the country. Over the years, due to the liberalization policies, India has become a consumer oriented market where the changes are brought by the demand and supply forces. Due to the high demand and the supply chains, there has been significant growth in the market. As such, more and more job opportunities are being created in different sectors. This has increased the per capita income considerably which has improved the poverty level to a great extent.

iv) **Liberalization and Economic Growth**

It was in the 1990s that the first economic liberalization policies were initiated by the then Finance Minister Dr. Manmohan Singh to encourage the wake of globalization in India. Since then, the economic condition of India has significantly increased. Over the years, India has gradually become one of the fastest growing economies in the world. It has become the 4th largest economy in the world in terms of the Purchasing Power Parity (PPP). It has been expected that the average yearly economic growth will range between 6 per cent and 7 per cent.

v) **Liberalization and Mergers in India**

The extents to which cross-border mergers and acquisitions are growing are all due to the globalization process. It has been observed of late that there are several sectors of the

economy that are heating up with a number of cross-border mergers and global alliances. This is only to improve the economic state of the country.

2. **Negative Impact of Liberalization in India**

The negative impact of liberalization in India is as follows:

i) **Reduced Profits**

Liberalization is often opposed by domestic industries that would have their profits and market share reduced by lower prices for imported goods.

ii) **Exploitation of Workers**

Socialists frequently oppose liberalization on the ground that it allows maximum exploitation of workers by capital.

iii) **Reduces Economic Freedom**

Liberalization is opposed by many anti-globalization groups, based on their assertion that free trade agreements generally do not increase the economic freedom of the poor or the working class, and frequently make them poorer.

iv) **Short-Term Adjustments**

Even though an economy is likely to benefit from the process of economic liberalization over time, certain short-term adjustments may not be so positive. If availability of imports causes a local company to lose its market share, there could be a short-term impact in terms of layoffs of workers.

v) **Effect on Capital**

Liberalization makes it easier to move capital from one country to another. Global institutions such as the World Trade Organization exist to make this movement easier by "encouraging" member states to change laws and regulations that eliminate barriers to capital flow. However, rapid inflow or outflow of capital can impact national economies negatively. For example, the sudden withdrawal of capital from East-Asian countries in the late 1990s precipitated a financial crisis.

Q12. Explain the Features of Liberalization**Ans :**

- i) Liberalization is freeing the industry from government restrictions.
- ii) It provides a conducive economic and business climate necessary for continuous growth.
- iii) It promotes a cost effective business environment, encourage competition and enhanced efficiency.
- iv) Liberalization of trade and investment regimes as well as deregulation.
- v) It obtains reciprocal market openings, by trading partners particularly in the context of multilateral, regional and bilateral negotiations.
- vi) Wider choice of goods and services and reduced prices resulting from increased international competition and specialization.

Q13. State the advantages and disadvantages of Liberalization.**Ans :****Advantages**

The several advantages of Liberalization are:

- i) In the medium and long term lower cost services provided to users.
- ii) The overall the quality of service is improved due to competition.
- iii) It avoids drawbacks of natural monopolies.
- iv) Helps for freeing up government funds for other social expenditures / investments.
- v) The creation of new revenue streams for governments through PPP in investments commonly undertaken with private sector.
- vi) Transfer of risk to private operators through PPP or BOT.
- vii) It increases entrepreneurship in country.
- viii) Attract foreign capital by potential investors, better suited to carry out investment.

- ix) Helps to increase the foreign investment.
- x) Increase the foreign exchange reserve.
- xi) Increase fit consumption and Control over price.
- xii) Reduction in dependence on external commercial borrowings.

Disadvantages

The several disadvantages of Liberalization are:

- i) Increase in unemployment.
- ii) Loss to domestic units.
- iii) Increase dependence on foreign nations.
- iv) Unbalanced development.
- v) Risk to create new types of private or other state controlled monopolies (players with dominant position in the market) or oligopolies.
- vi) Short term impacts can be negative.
- vii) Government has rushed to get rid of operation or investment in anticipation of high fee offered by bidder and soon discovers the incapacity-inability of bidder to respect contract terms.
- viii) Transfer of risk not sufficiently covered in contract, therefore reverting the operation or investment to state.
- ix) Renegotiation of contract required due to insufficient financial feasibility study or due to rushed government decision.
- x) Just before the transfer of investment or operation to state, its proper maintenance is "forgotten".

4.5 ECONOMIC REFORMS (SECOND GENERATION REFORMS)
Q14. Define Economic Reforms. Explain the nature of Economic Reforms.**Ans :****(Imp.)****Meaning**

India's business environment has evolved and transformed itself at a much faster pace in the recent years. India is now one of the most attractive destinations for doing business because of its booming economy, a relatively good GDP and other

economic indicators. All of this has become possible because of the economic reforms which were initiated in 1991. India has not looked back since then. Introduction of economic reforms has enabled India to break free from the shackles of financial turmoil and head towards attaining economic self-sufficiency.

Nature

Economic reforms in India refer to the set of instruments and strategies adopted since 1991. Liberalization, privatization and globalization are the three constituents of economic reforms. Let us discuss all these three constituents one by one.

1. Liberalization of the Economy

In the context of economic reforms, liberalization refers to shifting of license dominated regime to delicensing, deregulation and de bureaucratization. It has taken following measures towards liberalizing the economy.

i) Removal of Industrial Licensing

Except 18 industries relating to security and strategic concerns, social reasons, hazardous chemicals and overriding environmental, all industrial licensing was abolished.

ii) De-reservation of SSI Items

The items earlier reserved for SSI sector are gradually being de-reserved. Thus, the small scale industry has been forced to face both domestic and international competition.

iii) Withdrawing MRTP Restrictions

The provisions for MRTP companies for clearance of investment proposals have been withdrawn. This has freed big business houses to undertake expansion and establishment of new undertakings as well as to undertake mergers, amalgamations and takeovers.

2. Privatization of the Economy

Privatization refers to any process that reduces the involvement of state/public sector in economic activities of a nation. The following measures have been taken towards privatization of the Indian economy:

i) Entry of Private Players

Permitting the entry of the private corporate sector in such core sectors as steel, telecommunications, ports, airlines and power; and

ii) No Budget Support

No fresh budgetary support for Public Sector Enterprises (PSEs). This will lead to:

- a) Dilution of government equity in most of those PSEs which decide to go in for new projects and expansion;
- b) No new Central Public Sector undertakings (Ps Us) will be set up in the country;
- c) Issue of equity to the public by the identified PSUs; and
- d) Outright sale of identified PSUs.

iii) Disinvestment

As part of the ongoing privatization, the shares of public sector undertakings are being sold in the market with the objective of obtaining revenue to reduce budget deficit.

3. Globalization of the Economy

Globalization means the economic integration of the country with the rest of the world. The following measures have been taken towards globalization of the Indian economy:

i) Automatic Approval for FDI

Automatic approval for direct foreign investment up to 51 per cent foreign equity ownerships in a wide range of industries. Earlier, all foreign investments were limited to 40 per cent.

ii) Automatic Approval for Foreign Technology Agreements

Automatic permission for foreign technology agreements royalty payments up to 5 per cent of domestic sales or 8 per cent of export sales or lump sum payment of Rs.10 million. Automatic approval for all other royalty payments will also be given if the projects can generate internally the foreign exchange.

iii) Allowance of Foreign Equity Holdings

With a view to provide access to international markets, majority foreign equity holdings up to 51 per cent equity would be allowed for trading companies primarily engaged in export activities.

iv) Reduced Tariff Rates

As a part of shift in policy orientation from import substitution to export promotion, tariff rates were reduced and quantitative controls over imports were removed. Quantitative restrictions were replaced by price-based system.

Q15. What are the objectives of Economic Reforms.

Ans :

Economic reform is a comprehensive as well as continuous process that enfold the elements which play an important role in improving the economic and financial activities.

The main objectives of economic reforms are:

1. Liberalization and opening-up of the economy.
2. Improving the availability of resources.
3. Proper redistribution of resources so as to minimize inequality across the different rungs of the society as well as across sectors.
4. Balance between different sectors of the economy.
5. Making the corporate and the public sector more effective.
6. Minimizing poverty by reducing the rate of unemployment.
7. Minimizing budget deficits by generating more revenue.
8. To improve efficiency, productivity and international competitiveness of Indian industries and to impart dynamism to overall growth process.
9. To decontrol the Indian industrial economy from unnecessary bureaucratic controls.
10. To introduce liberalization with a view to integrate the Indian economy with the world economy.

11. To remove the restrictions on foreign direct investment.
12. To remove the restrictions of MRTP Act.
13. To shed the load of public sector enterprises which have shown a very low rate of return and incurring losses over the years.

Q16. Explain the Economic Reforms of various sectors.

Ans :

Since 1991, following economic reforms concerning liberalization, privatization, and globalization have also been undertaken:

1. Fiscal Reforms

Fiscal reforms mean increasing the revenue receipts and reducing the public expenditure of the government in a manner that production and economic welfare are not adversely affected. Its main objective was to reduce fiscal deficit that stood at 8.5 per cent of GDP in 1990-91, to 3 per cent. Several reforms were undertaken to achieve this objective, e.g., control over public expenditure, increase in taxes, sale of share of public sector enterprises, and increased price of public sector products. On the basis of the recommendations of Raja J.D. Chelliah Committee Report, long-term fiscal policy was announced. This fiscal policy initiated many reforms. The main fiscal reforms are as follows:

- i) Taxation system was made more scientific and rational. The maximum limit of income-tax was reduced from 50 per cent to 30 per cent,
- ii) Taxation system has been simplified,
- iii) Custom duties were brought down from 250 per cent to 10 per cent,
- iv) Excise duty on several commodities was reduced,
- v) Subsidies were cut down, and
- vi) Special efforts are being made by the government to cut public expenditure.

2. Financial/Monetary Sector Reforms

These reforms refer to reforms in country's monetary and banking policies. Government had appointed Narasimham Committee to introduce financial reforms. On the basis of recommendations of this committee, government has introduced the following significant financial/monetary reforms:

- i) **Reduction in Liquidity Ratio:** Statutory Liquidity Ratio (SLR) has been lowered from 38.5 per cent to 25 per cent. Likewise Cash Reserve Ratio (CRR) has been brought down from 12 per cent to 5 per cent.
- ii) **Reduction in Bank Rate:** Bank rate has been brought down to 6 per cent.
- iii) **Free Determination of Interest Rates:** Rates of interest should not be determined by the Reserve Bank rather the same be allowed to be determined by the banks independently within some limits.
- iv) **More Freedom to Banks:** Different banks should be given freedom to recruit their own officials. Inspection of the banks should be based on internal inspection reports.

3. International Trade and Investment Reforms

India's trade policy prior to the 1991 reforms was characterized by high tariffs and import restrictions. Foreign manufactured consumer goods were entirely banned, and capital goods, raw materials, and intermediate goods for which domestic substitutes existed were importable only through a bureaucratic licensing process. Illustrative of the severity of the situation, Infosys executives described how the founders had to visit Delhi nine times to obtain a license to import just one personal computer.

4. Industrial Sector Reforms

India's industrial policy was one of the areas most changed by the economic liberalization of the 1990s. The early reforms crystallized a trend that had been building since the national

government moved toward a pro-business approach to industrial policy during the 1980s. During the following decade, India transitioned from a centrally planned and operated economy to a market-driven economy, reflecting a global trend toward less regulated economies. Most government-operated industries in India are now privatized, though some political contention still exists over the removal of reservation schemes.

5. Infrastructure Reforms

A short drive through any Indian city reveals some of the serious deficiencies of India's infrastructure—roads full of potholes, relentless traffic, suffocating pollution. Although an efficient infrastructure is in the national interest, state governments control many infrastructure projects. Large private sector organizations are taking care of their own infrastructure needs in response to state governments' neglect. Infosys, e.g., maintains a fleet of nearly 600 buses to transport its 12,000 employees to work. Prime Minister Singh has declared that India must raise levels of investment in infrastructure to enable the nation to reach its goal of 8% growth. Unfortunately, due to India's large deficit, the nation often skimps on infrastructure spending. Additionally, improvements in centre-state cooperation are greatly needed.

6. Labour Reforms

While less than 10% of the 500 million person labour force is "organized" or has regular contractual employment, 12 labour regulations have made unions a powerful force in Indian politics. The tide is beginning to change, however. There are fewer labour strikes today, labour agreements now generally include clauses on productivity, and court judgments are no longer reflexively in favour of labour. While Rao recognizes the need for labour reform, he had hesitated to implement reforms like laying-off public sector workers or closing down or privatizing inefficient factories. Additionally, it remains difficult to fire workers and employers are

hesitant to hire new ones. A 1947 Act mandates state governments to require manufacturing firms with over 100 workers to gain governmental approval before firing workers. According to Nandan Nilekani, CEO of Infosys, the lack of a flexible labor policy is an important impediment to India's growth.

7. Agricultural Sector Reforms

Prime Minister Manmohan Singh maintains that India must improve conditions for farmers and invest more in education and healthcare to reach its goal of 8% growth. He aims to modernize agriculture and increase manufacturing by expanding agribusiness and food processing. Yet any change to the agricultural sector faces intense political opposition. Despite the fact that it contributes only 20% of India's GDP, the agricultural sector has always been politically influential. Interest group politics often hinder government attempts to cut costs in its agricultural spending. For example, Prime Minister Singh recently attempted to decrease government fertilizer subsidies but was stopped by a farmers' lobbying group from wealthy agricultural states.

8. Privatization Reforms

The Government of India runs coal mines as well as discotheques. Public enterprises account for nearly half of India's capital stock and enjoy commanding market shares in industries like mining, smelting, banking, and railways. Most, however, exhibit poor productivity of labour and capital. Many public enterprises were created and kept alive for political reasons. For example, a fertilizer factory in Haldia, West Bengal, kept thousands of workers on its payroll for years without ever commencing production.

Q17. State the various challenges faced by Economic Reforms.

Ans :

The EPW Research Foundation has pointed-out that "the new economic policy is seriously flawed in conception in its contents, strategy and approach and in many other respects". The shortcomings can be broadly classified under five major categories:

1. Absence of a Broader Development Strategy

The focus of both macro-economic stabilization and liberalization is to create a competitive environment in industry in which entrepreneurial decision-making will depend entirely on the market forces. The government's new industrial policy, therefore, lacks a well-defined strategy. On the basis of our experience in the past it is patently wrong to conclude that a well-articulated industrial strategy and heavy state intervention have no positive role to play in accelerating industrial growth.

2. Wrong Sequencing of Reforms

As a result of wrong sequencing of reforms, serious distortions have surfaced in economic management.

3. Hasty Pace of Reforms

The rapid pace of reforms has been determined by the controversial goal to globalize the Indian economy quickly. This has led to rapid deterioration in the quality of industrial structure.

4. Prerequisites of Reforms Ignored

The literature on stabilization and structural reforms is full of evidence that the shocks of these policies are better absorbed and their consequences for the well-being of the masses are very much reduced if the society has already reached a certain minimal level of human development. In contrast, the Indian situation is not at all encouraging from the point of view of human development and socio-economic structures.

5. Absence of Human Development Goals as an Integral Part of the Strategy

The stabilization and structural reform program in India is being implemented against a background of incomplete structural transformation, widespread poverty, low-level of human development and distorted pattern of expenditure on health and education oriented towards the relatively well-off sections of the society.

4.6 SECOND GENERATION REFORMS

Q18. State the objectives of Second Generation Reforms.

Ans :

Finance Minister Yashwant Sinha in his budget speech 2000-01 stated very clearly that National Democratic Alliance (NDA) Government intends to carry forward the process of implementation of the Second Generation Reforms. Elaborating on the philosophy of the Second Generation Reforms, he stated:

“Growth is not just an end in itself. It is the critical vehicle for increasing employment and raising the living standards of our people, especially of the poorest. Sustained, broad-based growth, combined with all our programmes for accelerating rural development, building roads, promoting housing, boosting knowledge-based industries and enhancing the quality of human resources, will impart a strong impetus to employment expansion. There can be no better cure for poverty than this in our country.”

For implementation, the Finance Minister laid down the following objectives:

1. Strengthen the foundations of growth of our rural economy, especially agriculture and allied activities.
2. Nurture the revolutionary potential of the new knowledge-based industries such as infotech, biotechnology and pharmaceuticals.
3. Strengthen and modernise traditional industries such as textiles, leather, agro-processing and the SSI sector.
4. Mount a sustained attack on infrastructure bottlenecks in power, roads, ports, telecom, railways and airways.
5. Accord the highest priority to human resource development and other social programmes and policies in education, health and other social services, with special emphasis on the poorest and weakest sections of society.
6. Strengthen our role in the world economy through rapid growth of exports, higher foreign investment and prudent external debt management.

7. Establish a credible framework of fiscal discipline, without which other elements of our strategy can fall.

Q19. Explain the Policy Measures of Second Generation Reforms.

Ans :

1. Fiscal Policy Reforms

The Government initiated various fiscal measures in order to reduce the fiscal deficit from 8.4 per cent of GDP in 1990-91 to 5.0 per cent in 1996-97 and to 3.7 per cent in 2006-2007. In order to achieve this target, the Government introduced various controls over public expenditure and took initiative to raise both its tax and non-tax revenue.

The other measures include imposition of fiscal discipline by both Central and State Governments, reduction of subsidies, developing a more efficient expenditure system, encouraging state governments to streamline the working State Enterprise, more particularly State Electricity Boards and State Transport Corporations and withdrawal of budgetary support to Central public sector enterprises and to improve their profitability and efficiency.

2. Monetary Policy Reforms

The Government pursued a restrictive monetary policy for reducing inflationary pressures and also for improving balance of payment position.

3. Pricing Policy Reforms

In order to reduce budgetary provision for subsidies and to promote a more flexible price structure, the Government increased the administered prices of various commodities and inputs (petroleum products and fertilizers) and gave greater freedom to public sector enterprises to set price as per market forces.

4. External Policy Reforms

The government introduced stabilization and import compression measures in order to reduce the current account deficit in balance of payments to 2.1 per cent of GDP in 1991-92 and then to 2 per cent of GDP in 1992-93.

5. Industrial Policy Reforms

In order to make necessary reforms in its industrial policy, the Government introduced its new industrial policy on July 24, 1991.

The various measures under industrial policy reforms include:

- (a) Abolition of the scheme of industrial licensing for all industrial projects excepting 18 industries related to security, strategic or environmental concerns etc.;
- (b) De-reservation of the area of public sector from 17 to 8 industries in order to open up area of investment for the private sector;
- (c) Elimination of the system of pre-entry scrutiny of investment decisions of the MRTP companies and controlling only "unfair or restrictive business practices";
- (d) Liberalization of location policy;
- (e) Abolition of phased manufacturing programmes earlier enforced to increase the pace of indigenization and
- (f) Removal of mandatory convertibility clause.

6. Foreign Investment Policy Reforms

The new industrial policy, 1991 made provision for increased flow of foreign investment in connection with technology transfer, marketing expertise and introduction of modern managerial techniques. Accordingly, the new policy included 34 priority industries in Annexure III to give automatic permission for foreign direct investment up to 51 per cent foreign equity.

In respect of foreign technology agreements automatic permission will be provided in high priority industry for royalty payments up to 5 per cent on domestic sales, 8 per cent on export sales or a maximum payment of Rs. 1 crore. Moreover, in order to promote exports of Indian commodities in international market, foreign trading companies were also allowed to raise their foreign equity holdings up to 51 per cent for export activities.

7. Public Sector Policy Reforms:

Considering the huge amount of losses incurred by a good number of public sector enterprises, the Government has taken various policy measures of making necessary reforms of the public sector.

These policy measures include:

- (a) Reservation of list of industries under public sector reduced to 8 as against 17 industries reserved earlier;
- (b) Review of those public investments be made in order to avoid those areas where social considerations are not so paramount and where private sector investment would be more efficient;
- (c) Enterprises earning higher profit and judged appropriate, will be provided with much higher degree of arrangement autonomy through the system of MOD;
- (d) Progressive reduction of budgetary support of public enterprises;
- (e) Inviting private sector participation to increase market discipline and also the competitive capacity of these public sector enterprises through disinvestment of part of equity of selected enterprises;
- (f) Referring the chronically sick public enterprises to the board for Industrial and Financial Reconstruction (BIFR) for its rehabilitation, reconstruction or rationalization.

8. Trade Policy Reform

In the context of globalization of the economy and also to promote international integration of our country, phasing out of excessive and indiscriminate protection given to domestic industry become necessary. This would develop a vibrant export sector and create a regime of price based system.

The main objective is to eliminate progressively the system of licenses and quantitative restrictions, particularly for capital goods and

raw materials so that these items can be placed easily on open general license (OGL). The new policy made provision for reduction of the scope of public sector monopoly sharply for most export items and also a good number of import items.

9. Social Policy Reforms

To meet the objective of poverty alleviation as a part of our adjustment process, the government has allocated a higher amount of outlays on elementary education, rural drinking water supply, assistance to small and marginal farmers, programmes for the welfare of scheduled caste and scheduled tribe and other weaker sections of the society, programme for women and children and also on infrastructure and employment generation projects.

As a part of this programme, the 1995-96 Budget has introduced a National Social Assistance Scheme in the form of housing assistance, old age pension, maternity benefit, group insurance for schemes etc. for those living below the poverty line.

4.7 CONCEPT OF PRIVATISATION

Q20. What do you understand by Privatization?

Ans : (Imp)

Introduction

Privatization is part of the process of rethinking the welfare state. Society is searching for new ways of delivering services because of our collective sense of efficiency. The entrepreneur, not the bureaucrat, is the hero of society. While we cannot be sure how it will all turn out, privatization will be part of the emerging post-welfare state. "Privatization where applied has achieved some measures of success in the local government".

Privatization is the process of involving the private sector in the ownership (or) operation of a state-owned (or) in a broader sense, it connotes private ownership. In other words Privatization

means transfer of ownership and or management of an enterprise from the public sector to the private sector. It also means the withdrawal of the State from an industry or sector, partially or fully. Another dimension of Privatization is opening-up of an industry that has been reserved for the public sector to the private sector.

Definitions

- i) **According to Stuart M. Butler**, Privatization is "the transfer of government assets or functions to the private sector".
- ii) **According to D. R. Pendse**, Privatization is "any process which reduces the involvement of the state or the government sector in the nation's economic affairs is a Privatization process".

Q21. Explain the nature of Privatization.

Ans :

The various nature of Privatization is as follows:

1. Transfer of Ownership

Privatization of State-Owned Enterprises (SOEs), i.e., the transfer of firm ownership from governments to private investors has become an important tool of economic policy, especially in less-developed and former communist countries.

2. Increased Competition

One of the prominent feature of Privatization is the enhanced competitive characteristics it provides to the enterprises which prove to be fruitful for the business as well as the country.

3. Increased Efficiency

Competitive environments and capital-market discipline increase the efficiency of privatised SOEs. The result is a lack of specific guidelines for shaping deal conditions given the characteristics of the firm and country.

4. Increased Opportunities

The worldwide Privatization wave creates opportunities for international diversification.

5. Effectiveness of Deal Depends on Host Country

The effectiveness of the deals depends, on the conditions of the Privatization process and the host country.

Q22. What are the Objectives of Privatization?

Ans :

1. Service Development and Efficiency

A second aim of privatization is to improve the economic efficiency and development of the service in question. For example, some states allow for the deregulation of utilities. By allowing more than one utility company to provide electricity or gas, customers are able to possibly reap the benefits of lower prices through competition. It is thought that privately-owned companies operate more efficiently than government entities. Efficiency is higher in the private sector due to a stronger connection between the business owners and its executive operators.

2. Budget Improvement

When services are provided by the private sector, a public entity such as a federal government is no longer financially responsible. Transferring the responsibility allows a public entity to gain income from the sale of the business or service in question and reduce its financial burden. The additional income gained from transfer of ownership might be used to reduce citizen tax rates, pay down debts or go toward other expenses.

3. Income Distribution and Political Influence

Privatization seeks to return the ownership of the economy to its citizens. Rather than placing full responsibility with a centralized government, businesses owned and operated by private members of society help contribute to their own well-being. Entrepreneurship is thought to be encouraged and able to flourish under privatization. In addition, political parties and lead figures use privatization to gain influence in political campaigns and push certain political agendas.

Other Objectives are as follows

- Greater efficiency
- Revealing the true and full cost of the service provided
- Promotion of technological advancement
- Development of capital markets
- Broadening the wealth and achieving widespread private ownerships in society
- Curbing inflation
- Raising extra-revenues for the government
- Eliminating hidden unemployment and reducing the power of public employee unions.

4.7.1 Forms of Privatisation**Q23. Explain the various forms of privatization.**

Ans :

(Imp.)

Privatization is sought to be achieved through any or more of the six important routes: sale to public, management-employee buyout, equal-access voucher privatisation, spontaneous privatisation, cross holding, and strategic sale.

1. Sale to Public

This route was mostly used in the early 1990s. As in a private sector enterprise, shares of CPSUs are offered to retail investors through public issues domestically and GDRs in the overseas markets. This route helps broadbase ownership, there is greater fairness and the wealth generated by the CPSUs will be shared with general public.

Several CPSUs followed this route. A few of them are NTPC, Power Grid Corporation, REC, Oil India, and Shipping Corporation of India.

Lack of adequate domestic capital, resistance from employees and difficulty of evaluating and negotiating deals make this route less attractive.

2. Management-Employee Buyout

Management-employee buyout is a widely used alternative to sale, notably in Croatia, Poland, Romania, and Slovenia. Buyout is relatively fast and easy to implement, both politically and technically. The route may lead to better corporate governance as insiders have better access than outsiders to information needed to monitor managers.

There are disadvantages however. One disadvantage is that the benefits are unevenly distributed: employees in good firms get valuable assets while those in money-losers get little or nothing of value. Another disadvantage is that the governments typically charge low prices to insiders and thus realize little revenue. Insiders do not bring in new skills and new capital. There could be managerial and worker entrenchment that might block further reforms.

3. Equal-access Voucher Privatisation

A third form of privatisation distributes vouchers across the population and attempts to allocate assets approximately evenly among voucher holders. Such programmes excel in speed and fairness. But they raise no revenue for government and they have unclear implications for corporate governance. Mongolia, Lithuania and the former Czechoslovakia were the first to implement this route to privatisation.

4. Spontaneous Privatisation

This route to privatisation is easy, obstacle-free, with no revenue generation for the government and has doubtful impact on corporate governance. Small firms lend themselves to this type of privatisation. Russia has divested most of its small units through this route. So is the case with Czechoslovakia, Hungary and Poland.

Q24. State the various modes of privitazation.

Ans : (Imp.)

Privatisation mainly takes the following routes:

1. Initial Public Offering (IPO)

Under this method, the shares of Public Sector Undertakings (PSUs) are sold to the retail investors and institutions.

2. Strategic Sale

In this method, the government sells its share in the PSU to a strategic partner. As a result, the management passes over to the buyer.

3. Sale to Foreigners

This is a variant of the strategic sales method where the buyer is not a domestic company but a foreign company.

4. Equal-Access Voucher Programmes

This form of privatisation involves distribution of vouchers across the population and attempts to allocate assets approximately evenly among voucher holders.

5. Management-Employee Buy-Outs

In this route to privatisation, managements and employees themselves buy major stakes in their firms.

6. Divestiture

This is also known as privatisation of ownership. The Public Enterprises sell their equities to the public or private enterprises. In countries where there are well developed capital markets, this form of privatisation is popular.

7. Managerial Privatisation

While the ownership of Public Enterprises remains with the Government, the top executives and the Board of Directors are drawn from the private sector.

8. Cold Privatisation

In this case the Public Enterprises are required to relate their activities to market conditions. Public Enterprises are distanced from the Government, though the ownership continues to be with the Government.

9. Denationalisation

In this case, the ownership of a public enterprise is transferred to the private sector. A large number of Public Enterprises were denationalised in countries like Chile, Bangladesh and Pakistan.

10. Franchising

Public Enterprises may develop new technology in products/services, which are then franchised to private sector companies for more production, so that the Public Enterprises do not invest in additional manufacturing facilities.

11. Leasing

In this case, the ownership remains with the Public Enterprises. They lease out the assets, particularly idle and under-utilised ones, to the private sector.

12. Contracting Out

Another form of privatisation is contracting out. Contracting out is common in public works, defence and many specialised services. Contracts for road construction, bridge construction and maintenance are common in countries like India, Brazil and Kenya.

13. Liquidation

Liquidation is another important form of privatisation of Public Enterprises. Liquidation may be either formal or informal. Formal liquidation refers to the closure of an enterprise and the sale of its assets.

Q25. State the Advantages and Disadvantages of Privatization.

Ans :

Advantages**1. Improved Efficiency**

The main argument for privatization is that private companies have a profit incentive to cut costs and be more efficient. If you work for a government run industry, managers do not usually share in any profits. However, a private firm is interested in making profit and so it is more likely to cut costs and be efficient.

2. Lack of Political Interference

It is argued governments make poor economic managers. They are motivated by political pressures rather than sound economic and business sense. For example a

state enterprise may employ surplus workers which is inefficient. The government may be reluctant to get rid of the workers because of the negative publicity involved in job losses. Therefore, state owned enterprises often employ too many workers increasing inefficiency.

3. Short Term view

A government many think only in terms of next election. Therefore, they may be unwilling to invest in infrastructure improvements which will benefit the firm in the long term because they are more concerned about projects that give a benefit before the election.

4. Shareholders

It is argued that a private firm has pressure from shareholders to perform efficiently. If the firm is inefficient then the firm could be subject to a takeover. A state owned firm doesn't have this pressure and so it is easier for them to be inefficient.

5. Increased Competition.

Often privatization of state owned monopolies occurs alongside deregulation – i.e. policies to allow more firms to enter the industry and increase the competitiveness of the market. It is this increase in competition that can be the greatest spur to improvements in efficiency. For example, there is now more competition in telecoms and distribution of gas and electricity.

However, privatization doesn't necessarily increase competition, it depends on the nature of the market. E.g. there is no competition in tap water. There is very little competition within the rail industry.

6. Government will raise revenue from the sale

Selling state owned assets to the private sector raised significant sums for the UK government in the 1980s. However, this is a one off benefit. It also means we lose out on future dividends from the profits of public companies.

Disadvantages**1. Natural Monopoly**

A natural monopoly occurs when the most efficient number of firms in an industry is one. For example tap water has very significant fixed costs, therefore there is no scope for having competition amongst several firms. Therefore, in this case, privatisation would just create a private monopoly which might seek to set higher prices which exploit consumers. Therefore it is better to have a public monopoly rather than a private monopoly which can exploit the consumer.

2. Public Interest

There are many industries which perform an important public service, e.g health care, education and public transport. In these industries, the profit motive shouldn't be the primary objective of firms and the industry. For example, in the case of health care, it is feared privatizing health care would mean a greater priority is given to profit rather than patient care. Also, in an industry like health care, arguably we don't need a profit motive to improve standards. When doctors treat patients they are unlikely to try harder if they get a bonus.

3. Government loses out on potential dividends

Many of the privatized companies in the UK are quite profitable. This means the government misses out on their dividends, instead going to wealthy shareholders.

4. Problem of regulating private monopolies

Privatization creates private monopolies, such as the water companies and rail companies. These need regulating to prevent abuse of monopoly power. Therefore, there is still need for government regulation, similar to under state ownership.

5. Fragmentation of industries

In the UK, rail privatisation led to breaking up the rail network into infrastructure and train operating companies. This led to areas where it was unclear who had responsibility. For example, the Hatfield rail crash was blamed on no one taking responsibility for safety. Different rail companies has increased the complexity of rail tickets.

6. Short-Termism of Firms

As well as the government being motivated by short term pressures, this is something private firms may do as well. To please shareholders they may seek to increase short term profits and avoid investing in long term projects. For example, the UK is suffering from a lack of investment in new energy sources; the privatised companies are trying to make use of existing plants rather than invest in new ones.

4.7.2 Privatisation in India (Impact & Issues)**Q26. Explain the impact of privatization in India.**

Ans : (Imp.)

Impact of Privatization in India

Privatisation in India is still at a minimalist level. Privatisation by way of sale of public sector enterprises is almost negligible while divestment is also existent by way of selling of a portion of shares of the 31 public sector enterprises. Privatisation got tremendous boost by the introduction of new economic policy in 1991 that allowed delicensing, relaxing entry restrictions and equity funding. Few examples of privatisation in India are Lagan Jute Machinery Company Limited, Modem Food Industries Limited, BALCO, Hotel Corporation of India Limited, Hindustan Zinc Limited, Paradeep Phosphates Limited, BSNL, etc.

The positive and negative impact of privatisation in India is as follows:

1. Positive Impact of Privatization in India:
The positive impact of privatisation in India can be seen in following areas:

- i) **Provide the Necessary Impetus to the Underperforming PSUs:** State-owned enterprises usually are outdone by the private enterprises competitively. When compared the latter show better results in terms of revenues and efficiency and productivity. Hence, privatisation can provide the necessary impetus to the underperforming PSUs.
- ii) **Provides Momentum in the Competitive Sectors:** Privatisation brings about radical structural changes providing momentum in the competitive sectors.
- iii) **Fosters Sustainable Competitive Advantage:** Privatization leads to adoption of the global best practices alongwith management and motivation of the best human talent to foster sustainable competitive advantage and improvised management of resources.
- iv) **Improves Financial Health:** Privatisation has a positive impact on the financial health of the sector which was previously state dominated by way of reducing the deficits and debts.
- v) **Lowers Net Transfer to the State-Owned Enterprises:** The net transfer to the state-owned enterprises is lowered through privatisation.
- vi) **Escalates the Performance Benchmarks of the Industry:** Helps in escalating the performance benchmarks of the industry in general.
- vii) **Beneficial for the Growth of Employees:** It can initially have an undesirable impact on the employees but gradually in the long-term, shall prove beneficial for the growth and prosperity of the employees.
- viii) **Better Services to the Customers:** Privatized enterprises provide better and prompt services to the customers and help in improving the overall infrastructure of the country.

2. Negative Impact of Privatisation in India: There are several disadvantages or the problems faced by privatization which are as follows:

- i) **Ignores Social Objectives:** Private sector focuses more on profit maximisation and less on social objective unlike public sector that initiates socially viable adjustments in case of emergencies and criticalities.
- ii) **Lack of Transparency:** There is lack of transparency in private sector and stakeholders do not get the complete information about the functionality of the enterprise.
- iii) **Support to Unfair Practices:** Privatization has provided the unnecessary support to the corruption and illegitimate ways of accomplishments of licenses and business deals amongst the government and private bidders. Lobbying and bribery are the common issues tarnishing the practical applicability of privatisation.
- iv) **Loses the Mission:** Privatization loses the mission with which the enterprise was established and profit maximization agenda encourages malpractices like production of lower quality products, elevating the hidden indirect costs, price escalation, etc.
- v) **High Employee Turnover:** Privatisation results in high employee turnover and a lot of investment is required to train the lesser-qualified staff and even making the existing manpower of PSU abreast with the latest business practices.
- vi) **Conflict of Interest:** There can be a conflict of interest amongst stakeholders and the management of the buyer private company and initial resistance to change can hamper the performance of the enterprise.
- vii) **Escalates Price Inflation:** Privatisation escalates price inflation in general as privatised enterprises do not enjoy government subsidies after the deal and the burden of this inflation affects the common man.

Q27. State the various problems of privatization.

Ans :

The following reasons have been identified in this regard:

1. Absence of Strategy

There is no proper strategy for disinvestment. There were no pre-defined norms, standards, or procedures regarding how to disinvest, what to disinvest, when to disinvest, and to whom to disinvest.

2. Unclear Objectives

There were no clear objectives, whether it was to meet fiscal deficit, to generate revenue, to increase productivity, to make them more competitive, etc.

3. Improper Timing

The government was not concentrating on the timing of disinvestment and as a result, most of the private sector investors are shying away from the process because of unattractive offers made by the government. Because of wrong timing, many PSUs were privatised at low price, such as ITDC, Maruti, etc. A good price can be obtained if privatisation is done when the performance, market capitalization and the industry prospects are good.

4. Difference of Opinion

There was no consensus over the disinvestment among the various political parties.

5. Lack of Proper Labour Strategy

Before foraying into disinvestments, labour was not taken into confidence. No proper strategy was formed for their redeployment, training and development. There was labour unrest in BALCO on the issue of disinvestment, and a nationwide strike in PSU banks on the issue of privatisation and consolidation.

6. Wrong Objectives

The entire proceeds of disinvestments are being used to mitigate fiscal deficit instead of using them for development of the social sector and building infrastructure.

7. Opaque

Lack of transparency in the entire process raises many eyebrows of many and has become a big hurdle.

8. Lack of Marketing

The government has done little and failed to attract foreign suitors for the disinvestment process in India.

4.8 GLOBALISATION**4.8.1 Meaning****Q28. Define Globalization. Explain the nature of Globalization.**

Ans :

Meaning

Globalization is a powerful real aspect of the new world system, and it represents one of the most influential 'forces in determining the future course of the planet. It has manifold dimensions - economic, political, security, environmental, health, social, cultural, and others. The focus here is on the concept of "globalization" as applied to the world economy. The term was coined in the 1980s, but the concept is an old one that has different interpretations to different people. Partly as a result of these different interpretations, there are very different reactions to "globalization," with some policy makers, scholars, and activists seeing it as a force for advancing the world economy while others, again all three, seeing it as a serious danger to the world economic system.

Globalization is also responsible for the major increases in worldwide trade and exchanges in an increasingly open, integrated, and borderless international economy. There has been remarkable growth in such trade and exchanges, not only in traditional international trade in goods and services, but also in exchanges of currencies, in capital movements, in technology transfer, in people moving through international travel and migration, and in international flows of information and ideas.

Definitions

- i) **According to International Monetary Fund (IMF)**, "Globalization is the growing economic interdependence of countries worldwide through increasing volume and variety of cross border transactions in goods and services and of international capital flows and also through the more rapid and widespread diffusion of technology".
- ii) **According to Charles Hill**, "Globalization is the shift towards a more integrated and interdependent world economy. Globalization has two main components - the globalization of markets and the globalization of production".

Nature of Globalization

The idea of globalization may be simplified by identifying several key features which are as follows:

1. **Improved Technology in Transportation and Telecommunications:** What makes the rest of this list possible is the ever-increasing capacity for and efficiency of how people and things move and communicate. In past years, people across the globe did not have the ability to communicate and could not interact without difficulty. Nowadays, a phone, instant message, fax, or video conference call can easily be used to connect people.
2. **Movement of People and Capital:** A general increase in awareness, opportunity, and transportation technology has allowed for people to move about the world in search of a new home, a new job, or to flee a place of danger. Most migration takes place within or between developing countries, possibly because lower standards of living and lower wages push individuals to places with a greater chance for economic success.
3. **Diffusion of Knowledge:** The word 'diffusion' simply means to spread-out, and that is exactly what any new found knowledge does. When a new invention or way of doing something pops-up, it does not stay secret for long. A good example of this is the

appearance of automotive farming machines in Southeast Asia, an area long home to manual agricultural labour.

4. **Non-Governmental Organizations (NGOs) and Multinational Corporations:** As global awareness of certain issues has risen, so too has the number of organizations that aim to deal with them. So called non-governmental organizations bring together people unaffiliated with the government and can be nationally or globally focused.
5. **Growing Worldwide Interconnections:** This is one characteristic of globalization. Some interconnections can be predicted, others cannot. Moreover, factors other than globalization also shape events.
6. **Rapid, Discontinuous Change:** Another characteristic of globalization is **that** this process has occurred rapidly but not at a steady pace. In other words, a chart of global interconnections would follow an upward slope, but the regression line would not be a smooth one.
7. **Increased Number and Diversity of Participants:** This characteristic of globalization is growth in the numbers and diversity of actors involved in global activities. **For example**, participants in global business activities now include many Small to Medium Sized Enterprises (SMEs) as well as large ones.
8. **Growing Complexity:** Finally, the "one world" characterization of globalization exposes most of us. To many more people and ideas whose perspectives on globalization differ. Domestic questions that once seemed to have simple answers become more/complex when one realises that others worldwide have different "simple" answers to the same questions.

Q29. What are the characteristics of Globalization.

Ans : (Imp.)

1. Over the past two decades, there is a rapid globalization of markets and production.

2. The globalization of markets implies that national markets are merging into one huge marketplace.
3. Erosion of national sovereignty and national borders through international agreements leading to organizations like the World Trade Organization (WTO) and European Union (EU).
4. Development of Global Financial System.
5. Reduced transportation costs, especially from development of containerization for ocean shipping.
6. The globalization of production implies that firms are resorting to specialised world locations for particular activities than involving their own resources. As a consequence, it looks increasingly irrelevant to talk about American products, Japanese products, or German products, since these are being replaced by "global" products.
7. Two factors seem to underlie the trend toward globalization: declining trade barriers and changes in communication, information, and transportation technologies.
8. Since the end of World War II, there has been a significant lowering of barriers to the free flow of goods, services, and capital.
9. Increase in international flow of capital.
10. Increase in the share of the world economy controlled by multinational corporations.
11. Increased role of international organizations such as WTO, WIPO and IMF that deal with international transactions.
12. Increase of economic practices like outsourcing by multinational corporations.
13. Intellectual Property Restrictions.
14. Harmonization of intellectual property laws across nations (generally speaking, with more restrictions).
15. Supranational recognition of intellectual property restrictions (e.g. patents granted by China would be recognized in the US).
16. Following globalization of production and markets, world trade has grown faster than world output in the last decade. Foreign direct investment has surged, imports have penetrated more deeply into the world's industrial nations, and competitive pressures have increased.
17. The development of the microprocessor and related developments in communication and information processing technology have helped firms link their worldwide operations into sophisticated information networks.
18. Development of a global telecommunications infrastructure and greater transborder data flow using technologies such as Internet communication satellites and telephones.
19. Increases in the number of standards applied globally, e.g., copyright laws and patents.
20. The most dramatic environmental trend has been the collapse of communist power in Eastern Europe, which has created enormous long-run opportunities for international businesses. In addition, the move towards free market economies in China, Latin America and India is creating opportunities (and threats) for Western international businesses.
21. The benefits and costs of the emerging global economy are being hotly debated among business people, economists, and politicians. The debate focuses on the impact of globalization on jobs, wages, the environment, working conditions, and national sovereignty.
22. Some argue that even terrorism has adopted globalization with attacks in foreign countries that have no direct relation with another.
23. Culturally
 - (i) Greater international cultural exchange.
 - (ii) Spreading of multi culturalism, and better individual access to cultural diversity.
 - (iii) The imported culture can easily supplant the local culture, causing reduction in diversity through hybridization or even assimilation.
 - (iv) The most prominent form of this is Westernization.
 - (v) Greater international travel and tourism.
 - (vi) Greater immigration including illegal immigration.

24. Managing an international business is different from managing a domestic business for at least four reasons:

- (i) Countries are different
- (ii) The range of problems confronted by a manager in an international business is wider and the problems themselves more complex than those confronted by a manager in a domestic business.
- (iii) Managers in an international business must find ways to work within the limits imposed by governments' intervention in the international trade and investment system.
- (iv) International transactions involve converting money into different currencies.

Q30. Explain the advantages and disadvantages of Globalization.

Ans :

(Impl.)

Advantages

The advantages of globalization can be summarized as follows:

- (a) **Promise of Increase Productivity and Higher Living Standards:** Globalization brings in new opportunities such as access to markets and technology transfer. These opportunities hold out the promise of increased productivity and higher living standards.
- (b) **Increase in Trade in Goods and Services:** There is tremendous growth in trade in goods and services. "Trade in goods and services has grown twice as fast as global GDI in the 1990s and the share attributable to developing countries has climbed from 23 to 29 percent". Increased international competition in services will lead to reduction in prices and improvements in quality. This will increase the competitiveness of downstream industries. Both industrial and development economics will gain by opening their markets.

(c) **Provide New Opportunities for Growth:**

For developing countries, trade is the primary vehicle for realizing the benefits of Globalization. Imports bring additional competition and variety to domestic markets, which benefit consumers. Exports, on the other hand, enlarge foreign markets and benefit business. Further trade exposes domestic firms to the best practices of foreign firms and encourages greater efficiency. Trade gives firms access to improved capital inputs such as machine tools, which boosts productivity. Trade encourages the redistribution of labour and capital too relatively to more productive sectors. It has contributed to the ongoing shift of some manufacturing and services activities from industrial to developing countries, providing new opportunities for growth.

(d) **Globalization of Financial Markets:**

Globalization of finance markets affects development because finance plays an important role in economic growth and industrialization. Financial Globalization affects growth in two ways. First, it increases the global supply of capital. Second, it promotes domestic financial development and hence, improves allocative efficiency, creates new financial instruments, and raises the quality of banking services.

(e) **Increased Flow Of foreign Market Capital:**

Globalization leads to increased flows of capital across countries. Flows of foreign capital offer substantial economic gains to all parties. Foreign investors diversify their risks outside their home market and gain access to profitable opportunities throughout the world. Economies receiving inflows raise the level of investment. When there is foreign investment it is generally accompanied by management expertise, training programs and important linkages to suppliers and international markets.

(f) **Impact on Poverty:**

The fast growth and overall development resulting from liberalization, increased flow of trade and capital could

have a major impact on poverty. It is likely to reduce the number of people living in absolute poverty.

- (g) **Increase the Level of Interdependence and Competitiveness:** Globalization is supposed to accelerate and increase the level of interdependence and competitiveness among nation. It is a change from plan to market.

As a consequence, markets for merchandise trade are expanding, more and more service are being traded internationally, and capital is flowing in quicker and increasingly diverse ways across countries and regions. There is increasing integration of countries into World markets for goods, services and capital. In short, Globalization widens and intensifies international linkages in trade and finance.

- (h) **Induce Domestic Firms to Improve Technology:** The better technology brought in by the MNCs may induce or provoke the domestic firms to absorb similar technology. This may improve their competitiveness and expansion.

Disadvantages of Globalization

The universal acceptance of the market economy and the Globalization led by private enterprises tend to have some harmful effects on the economy of developing countries. They are discussed below:

- (a) **Takeover of National Firms:** There are a large numbers of cases of takeover of national firms by foreign firms. In some cases, the domestic firms had to handover the majority of equity to foreign partners of joint ventures due to their inability to bring in additional capital.
- (b) **Ruin of Traditional Crafts and Industries:** Globalization has lead to replacement of traditional and indigenous products by modern products. This has resulted in the ruin of traditional crafts and industries and the livelihood of the people depended on these sectors.

- (c) **Brings Instability:** Globalization sometimes brings instability and unwelcome change in the economy. It exposes workers to competition from imports, which can threaten their jobs. The inflow of foreign capital into the country through Globalization may undermine banks.

- (d) **Widens the Disparity:** Globalization will widen the disparity between one who are associated with market and one who are not. With the expansion of trade and foreign investment, the gaps among the developing countries will widen .it has brought in increased income inequality in many industrial countries it is argued that the developing countries and the poor people are not in a position of achieving benefits from Globalization. The only beneficiaries of it are the developed countries and the MNCs.

4.8.2 Drivers

Q31. Explain the drivers of globalization.

Ans : (Imp.)

1. Development of WTO (World Trade Organization)

The Uruguay round negotiations were concluded by the governments of the member countries of the General Agreement of Trade and Traffic (GATT) on 15 th December 1994. The outcome of the meeting was supported politically by the ministers by signing the Final Act in Marrakesh, Morocco, on the 15th April, 1994.

Marrakesh declaration outlined that the Uruguay round results will encourage the world economy and results in increased trade, investment, employment, and income growth all over the world.

WTO was established on 1st January 1995 to promote the implementation, administration, operation and the objectives of the multinational trade agreements and plurilateral trade agreements.

During 1995 and 2006, the development of W.T.O. increased the exports by 2.5 times and imports by 10 times.

2. Regional Economic Integration

When the countries belonging to the same region or area are integrated regionally and economically then it would result in an increase in the market size, demand for various products and services, production quantity, employment and the economic activity of that region. It also increases the purchasing power and improves the living standards of the people. The important regional integrations are European Union (EU), NAFTA and ASEAN.

3. Declining Trade Barriers

It is one of the major driver of globalization. Before the World War-II, the exports and imports between various countries was very less, as the government at that time imposed trade barriers like quotas, tariffs etc., to protect and safeguard its domestic business from the international business.

But this situation was completely changed after world war II, as the advanced countries decided and agreed to reduce the tariffs so that the goods can be flowed easily or freely among various countries. In Uruguay round of negotiations, the trade barriers were reduced to a significant extent and GATT was extended to cover manufactured goods and services.

By the end of 2000, the tariff rates were reduced to 3.9% by the advanced countries, due to which the international trade was increased about 25 times in between 1950 and 2004. These reductions in tariffs and trade barriers lead to the growth of global business.

4. Declining Investment Barriers

In order to perform global business the firms have to invest capital in the foreign countries for carrying out manufacturing and other related tasks. But the foreign governments imposes barriers on foreign investment to safeguard its domestic business.

However, several countries have eliminated these barriers on foreign investment for improving and encouraging global business.

Between 1991 and 2000, about 1,121 changes were made in the laws governing Foreign Direct Investment (FDI) and 95% of the changes were made for supporting FDI.

In 1980 there were about 181 bilateral treaties among 164 countries but this number was increased to 2081 in 2006. These treaties helps in encouraging and safeguarding the investment among the countries and allows the speedy growth of global trade and production. This in turn increased the global trade to about 8 times in between 1950 and 2006.

5. Growth in Foreign Direct Investment (FDI)

The investment made by a firm in a foreign country is known as FDI.

The following are the reasons for the growth of FDI,

- (a) To increase the sales and profits.
- (b) To enter the fast growing markets.
- (c) To decrease the costs.
- (d) To integrate the trade blocks.
- (e) To safeguard domestic markets.
- (f) To increase the knowledge of technology and management.

In the last 25 years, the flow of FDI has increased significantly with a remarkable growth during 1990's. In between 1990 and 2006, the outflow of FDI was about 18 times higher when compared to the outflow during 1970's which increased from US\$ 564 billion in 1980 to US \$19,636 billion in 2006.

The advanced countries were the key players in the flow of FDI. They are the main providers and recipients of FDI as 84% of FDI was given by developed countries and 64% of FDI in 2006.

Developing countries are now receiving higher FDI when compared to the FDI received in 1980. Hence, the growth and wide spread of FDI in the last few years has significantly increased globalization of production and marketing.

6. Strides in Technology

Technology which has grown immensely after 1980 has brought revolutionary changes in various areas like telecommunication, Information Technology (IT) and transportation technology.

The latest developments made in the Information Technology (IT) industry facilitated the global company to grow into a virtual global company.

(a) Microprocessors and Telecommunications: The development of microprocessors resulted in the growth of high power, high-speed, low cost computing and holding or storing large amount of information.

The improvements and developments achieved in the growth of micro-processor lead to the growth telecommunication which enhanced the speed and efficiency of organizing the operations of global business firms.

(b) The Internet and World Wide Web: The internet and world wide web are regarded as the back bone of global business as they coordinate, control and monitor the various activities of global business.

The different facilities offered by internet and world wide web are voice data mail, real time video communication like video conferencing helps the global business companies to carry out its activities efficiently.

(c) On-line Globalization: The companies operating globally can transfer and send various information relating to the changes in raw materials, customer preferences, changes in product design etc., to all the parts of the globe through internet.

Internet also enables the companies to receive and answer the customer complaints and their queries. Thus, internet helps us carrying out the globalization process at a faster rate and at a low cost.

(d) Transportation Technology: The significant improvements and developments which were made in transportation technology are introduction of commercial jet aircraft, super fighters containers etc., these developments has reduced the distance between the various countries.

These development also helps in making the transportation from one mode to the other mode easily and decreased the travel time between the various countries.

7. Growth of Multinational Companies (MNC)

Multinational company/corporation is an organization which carry out its business in more than one country. It produces markets, invests and operates all over the world.

Because of the international market expansion, market superiority and financial superiority MNC's are developing and spreading its activities all over the world.

In 2007 EU had 163 out 500 top MNC's of the world, USA had (162), Japan had (67) whereas developing countries has around 53 MNC's among the top 500 MNC's.

4.8.3 Modes of Entry

Q32. Explain various modes of globalization.

Ans :

A company can enter a new global market through various modes of entry including:

Exporting

It is a traditional mode of entry where a company sells its goods/ services in a foreign land, without establishing its operations there. Exporting can be:

- **Direct exporting:** In this approach, a company directly exports its products/ services to an international market. This enables the company to have greater control on its marketing and operations. For example, the Austrian energy drink Red Bull entered India via the direct exporting route.
- **Indirect exporting:** In this approach, a company employs an agency in the foreign country to handle its product or service. For example, the US chewing gum company Wrigley entered the Indian market by using the distribution outlets of Parrys, a local confectionery company.
- **Licensing:** In this mode of entry, a company (foreign licensor) sells a right to a local manufacturer (licensee) to produce its product or service. The foreign licensor invests its own capital in the venture. The licensee pays a fee to get the royalty from the foreign licensor to use its trademark, business system, and format. For example, Walt Disney Corporation used the licensing mode to enter India.
- **Franchising:** In this approach, a company (franchiser) sells the right to use its trademark and sell its products or services to a semi-independent local business (franchisee). The franchisee bears the cost and risks of establishing the operations in the foreign market. For example, McDonald's and KFC entered Indian market through franchising.
- **Joint venture:** In a joint venture (JV), a company establishes a new company in a foreign market in collaboration with a local partner. The reasons could be to:
 - Enter into a foreign market
 - Share risks and rewards in a specific proportion
 - Share technology
 - Develop a product jointly as partners
 - Conform to regulations by the local governmentFor example, Singapore Airlines entered the Indian market in a joint venture with the Tata Group, as it was not possible for them to enter India as a wholly owned subsidiary.
- **Mergers and acquisitions:** A merger is a process where two or more companies combine into a single entity to accumulate their mutual assets and liabilities. The merger enables them to:
 - Achieve economies of scale
 - Avail tax benefits
 - Get synergy and diversify products/services

After a merger, the merging entities lose their previous identities and assume the identity of the

newly formed entity.

Acquisition, on the other hand, is the process where a company acquires controlling shares of another company. The acquired company does not lose its identity after an acquisition. The acquisition may be a friendly acquisition (such as Walmart acquiring Flipkart) or a hostile takeover (such as L&T Infotech acquiring Mindtree).

- **Strategic alliance:** In a strategic alliance, two or more companies formalise an agreement to share their risks and resources in order to achieve a common set of objectives, while assuming their independent identities. The strategic alliance enables them to:
 - Expand production capacity
 - Increase market share for a product or service
 - Develop core technologies
 - Use brand image and market knowledge of both entities

For example, Motorola formed a strategic alliance with Toshiba to enter Japanese cellular phone market.

- **Foreign direct investment (FDI):** In FDI, a company enters a foreign market by investing in that country, either through the acquisition of a local entity or by setting up a new entity. This mode of entry is subject to the local government's policies and regulations. For example, LG and Samsung entered India through FDI route.
- **Outsourcing:** This is a method by which a company can reduce its costs and focus on core operations by transferring a part of work to low-cost suppliers in a foreign land. It involves both domestic and foreign contracting as well as offshoring (relocation of a business function to another country).
- **Contract manufacturing:** In this process, a foreign company hires a local manufacturer to produce a product or a part of the product. It is a cost-effective mode of production while utilizing local skills and expertise. The foreign firm retains the control to market and sell the product.
- **Turnkey projects:** In these projects, a foreign organisation takes the responsibility of setting up a new organisation on behalf of a client organisation. The client will pay the contractor company for planning the infrastructure, constructing new facilities, and training of staff. After the project is complete, the contractor hands over the new organisation to the client for initiating the actual operations. For example, a Singapore based company takes a contract from the Indian government to set up a smart city project. Such projects depend on various factors, such as the local government's policies, competition, and resource availability.

Short Question and Answers

1. Business Environment.

Ans :

Meaning

Environment refers to all external forces which affect the functioning of business. Environment factors are largely, if not totally, external and beyond the control of individual industrial enterprises and their managements. The surrounding in which business operates is called business environment.

The word 'Business Environment' has been defined by various authors as follows:

Definitions

- i) **According to Keith Davis**, Business environment is the aggregate of all conditions, events and influences that surround and affect it.
- ii) **According to Reinecke and Schoell**, the environment of business consists of all those external things to which it is exposed and by which it may be influenced directly or indirectly.

These definitions give a clear understanding of the business environment. We can say that business environment is a combination or mixture of complex, dynamic and uncontrollable external factors within which a business is to be operated.

2. Nature of business environment

Ans :

- **Internal and external environment:** Every business is surrounded by internal and external environment. Internal environment can be controlled by an organisation, like men, money, material, machine and method, whereas external environment is uncontrollable like political conditions, technologies, legal regulations, etc.
- **Dynamic and ever-changing:** Business environment keeps on changing frequently in terms of technologies, government rules and regulations, socio-economic conditions, etc., which make business dynamic.

➤ **Complexity of the environment:** Business environment cannot be easily analysed because of too much complexity involved. Environment consists of a number of factors, events, conditions and influences, generating from different sources which impact business, thus, making the business complex.

➤ **Inter-relatedness:** Factors of business environment are related to each other. For example, change in political parties will result in changing the government rules, fiscal policies, market conditions, technology, etc. So, all the factors need to be scanned properly because these factors are inter-related to each other.

➤ **Uncertainty:** It is difficult to predict the changes going to take place in future because environment keeps on changing. These changes are uncontrollable. So, business can only try to combat from these challenges. For example, in case of fashion industries, changes take place so frequently, economy could collapse any time.

3. Define Economic planning.

Ans :

Meaning

Economic planning is a term used to describe the long-term plans of an incumbent government to coordinate and develop the economy. Economic planning is commonly a feature of big government as it usually involves increased spending on things such as public work schemes and government programmes. Economic planning is the process by which key economic decisions are made or influenced by central governments. It contrasts with the laissez-faire approach that, in its purest form, avoid any attempt to guide the economy, relying instead on market forces to determine the speed, direction, and nature of economic evolution.

The government has to prepare and implement a comprehensive economic plan integrating the private sector with the public sector. It is for these reasons that we have been having economic planning since 1951 when the First Five Year Plan was launched.

Economic planning is defined as “the making of major economic decisions - what and how much is to be produced, how, when, and where it is to be produced and to whom it is to be allocated by the conscious decision of a determinate authority on the basis of a comprehensive survey of the economic system as a whole”.

Definitions

- (i) **According to Dickinson**, “Economic planning is the making of all major economic decisions by conscious decisions of comprehensive survey of the economic system as a whole”.
- (ii) **According to the Indian Planning Commission**, “Economics planning is, essentially a way of organizing and utilizing resources to maximum advantage in terms of defined social ends”.

4. NITI Aayog.

Ans :

NITI Aayog (or) National Institution for Transforming India Aayog is basically a policy think tank of Government of India and State Governments that replaces 65-year old Planning Commission. Union Government of India had announced formation of NITI Aayog on 1st January, 2015.

The NITI Aayog will have a governing council comprising all State Chief Ministers and Lt. Governors of Union Territories and will work towards fostering a ‘Co-operative federalism’ for providing a “national agenda” to the Centre and States.

The body is comprised of a CEO and a Vice Chairperson, to be appointed by the Prime Minister, in addition to some full-time members and two part-time members, while four Union Ministers would serve as ex-officio members. Besides, there would be specific regional councils, while experts and specialists from various fields would be called as special invitee nominated by the Prime Ministers.

NITI Aayog will serve as a “think tank” of the government as a “directional and policy dynamo” and would provide both to the governments at the centre and in the states with strategic and technical advice on key policy matters including economic issues of national and international importance.

5. Define Liberalization.

Ans :

Meaning

Liberalization is a very broad term that usually refers to fewer government regulations and restrictions in the economy in exchange for greater participation of private entities.

Liberalization refers to the relaxation of the previous government restriction usually in area of social and economic policies. When government liberalized trade, it means it has removed the tariff, subsidies and other restriction on the flow of goods and services between the countries. Economic liberalization, in its modern form, usually describes internal economic reform such as deregulation and privatization and the removal of barriers to trade in services as well as the more conventional view of free trade as the removal of tariffs on physical imports.

Liberalization does not mean simply inviting a number of foreign companies or Multinational Corporations (MNCs) on whatever terms with whatever objectives in mind and in whatever sector, indiscriminately. By implication, economic liberalization suggests that the entire opening up of the economy should ultimately be for building up strength of its own. Hence, inviting foreign companies/MNCs should be a means and not an end. Liberalization means removal of control and not of regulations. Liberalization does not imply any secret deals behind the curtain. On the contrary, it does mean the elements of transparency and accountability in the functioning and procedures relating to the various sectors of the economy.

Definition

According to M. Dhanuja, liberalization is related to that state of economic conditions in which rules, regulations and controls are eliminated to promote competition.

6. Advantages of Liberalization.

Ans :

- i) In the medium and long term lower cost services provided to users.
- ii) The overall the quality of service is improved due to competition.

- iii) It avoids drawbacks of natural monopolies.
- iv) Helps for freeing up government funds for other social expenditures / investments.
- v) The creation of new revenue streams for governments through PPP in investments commonly undertaken with private sector.
- vi) Transfer of risk to private operators through PPP or BOT.

7. Define Economic Reforms.

Ans :

Meaning

India's business environment has evolved and transformed itself at a much faster pace in the recent years. India is now one of the most attractive destinations for doing business because of its booming economy, a relatively good GDP and other economic indicators. All of this has become possible because of the economic reforms which were initiated in 1991. India has not looked back since then. Introduction of economic reforms has enabled India to break free from the shackles of financial turmoil and head towards attaining economic self-sufficiency.

8. Objectives of economic reforms.

Ans :

1. Liberalization and opening-up of the economy.
2. Improving the availability of resources.
3. Proper redistribution of resources so as to minimize inequality across the different rungs of the society as well as across sectors.
4. Balance between different sectors of the economy.
5. Making the corporate and the public sector more effective.
6. Minimizing poverty by reducing the rate of unemployment.
7. Minimizing budget deficits by generating more revenue.
8. To improve efficiency, productivity and international competitiveness of Indian industries and to impart dynamism to overall growth process.

9. Privatization.

Ans :

Privatization is part of the process of rethinking the welfare state. Society is searching for new ways of delivering services because of our collective sense of efficiency. The entrepreneur, not the bureaucrat, is the hero of society. While we cannot be sure how it will all turn out, privatization will be part of the emerging post-welfare state. "Privatization where applied has achieved some measures of success in the local government".

Privatization is the process of involving the private sector in the ownership (or) operation of a state-owned (or) in a broader sense, it connotes private ownership. In other words Privatization means transfer of ownership and or management of an enterprise from the public sector to the private sector. It also means the withdrawal of the State from an industry or sector, partially or fully. Another dimension of Privatization is opening-up of an industry that has been reserved for the public sector to the private sector.

10. Define Globalization.

Ans :

Globalization is a powerful real aspect of the new world system, and it represents one of the most influential 'forces in determining the future course of the planet. It has manifold dimensions - economic, political, security, environmental, health, social, cultural, and others. The focus here is on the concept of "globalization" as applied to the world economy. The term was coined in the 1980s, but the concept is an old one that has different interpretations to different people. Partly as a result of these different interpretations, there are very different reactions to "globalization," with some policy makers, scholars, and activists seeing it as a force for advancing the world economy while others, again all three, seeing it as a serious danger to the world economic system.

11. Advantages of Globalization

Ans :

- (a) **Promise of Increase Productivity and Higher Living Standards:** Globalization brings in new opportunities such as access to markets and technology transfer. These opportunities hold out the promise of increased productivity and higher living standards.
- (b) **Increase in Trade in Goods and Services:** There is tremendous growth in trade in goods and services. "Trade in goods and services has grown twice as fast as global GDI in the 1990s and the share attributable to developing countries has climbed from 23 to 29 percent". Increased international competition in services will lead to reduction in prices and improvements in quality. This will increase the competitiveness of down-stream industries. Both industrial and development economics will gain by opening their markets.
- (c) **Provide New Opportunities for Growth:** For developing countries, trade is the primary vehicle for realizing the benefits of Globalization. Imports bring additional competition and variety to domestic markets, which benefit consumers. Exports, on the other hand, enlarge foreign markets and benefit business. Further trade exposes domestic firms to the best practices of foreign firms and encourages greater efficiency. Trade gives firms access to improved capital inputs such as machine tools, which boosts productivity. Trade encourages the redistribution of labour and capital too relatively to more productive sectors. It has contributed to the ongoing shift of some manufacturing and services activities from industrial to developing countries, providing new opportunities for growth.
- (d) **Globalization of Financial Markets:** Globalization of finance markets affects development because finance plays an important role in economic growth and industrialization. Financial Globalization affects growth in two ways. First, it increases the global supply of capital. Second, it promotes domestic financial development and hence, improves allocative efficiency, creates new financial instruments, and raises the quality of banking services.

Choose the Correct Answer

1. An environment which is increasingly complex and turbulent displays [d]
(a) More orderly competition (b) More predictable demand
(c) A reduced risk of product obsolescence. (d) Increased speed of innovation
2. What refers to the external forces which have a bearing on the functioning of the business? [a]
(a) Environment (b) Culture
(c) System (d) None of these
3. Which among the following Industrial Policy resolution/statement was based upon the Mahalanobis Model of growth? [a]
(a) Industrial Policy resolution – 1956 (b) Industry Policy statement – 1973
(c) Industrial Policy statement -1977 (d) Banking Policy 1969
4. Which is an economic system based on the principle of free enterprise? [a]
(a) Capitalism (b) Socialism
(c) Mixed Economy (d) Marxism
5. The Govt. introduced the import liberalization policy in the year? [a]
(a) 1977- 78 (b) 1991-92
(c) 1988-89 (d) 2001-02
6. Which among the following Industrial Policy resolution/ statement was based upon the Mahalanobis Model of growth? [a]
(a) Industrial Policy resolution – 1956 (b) Industry Policy statement – 1973
(c) Industrial Policy statement -1977 (d) Banking Policy 1969
7. Which of the following planning is executed at the grass root level? [b]
(a) Centralized planning (b) Decentralized planning
(c) Fixed planning (d) Imperative planning
8. Liberalization does not include? [c]
(a) Removing trade barriers (b) Liberal policies
(c) Introducing quota system (d) Disinvestment
9. Which among the following is not opened for private sector participation? [d]
(a) Power sector (b) Telecommunication sector
(c) Education sector (d) Railways
10. Relaxing the restrictions and controls imposed on business and industry means? [a]
(a) Liberalization (b) Privatization
(c) Globalization (d) None of the above
11. In India, Liberalization & Privatization began from? [a]
(a) 1991 (b) 1971
(c) 1981 (d) 1947

Fill in the blanks

1. _____ refers to all external forces which affect the functioning of business.
2. _____ is the making of all major economic decisions by conscious decisions of comprehensive survey of the economic system as a whole.
3. NITI stands for _____
4. _____ refers to the relaxation of the previous government restriction usually in area of social and economic policies.
5. _____ Economic reforms in India refer to the set of instruments and strategies adopted since 1991.
6. _____ means the economic integration of the country with the rest of the world.
7. NDA stands for _____.
8. _____ is “the transfer of government assets or functions to the private sector”.
9. Business _____ encompasses all those factors that affect a company’s operations
10. MRTP stands for _____ .

ANSWERS

1. Environment
2. Economic planning
3. National Institution for Transforming India Aayog
4. Liberalization
5. Economic
6. Globalization
7. National Democratic Alliance
8. Privatization
9. Environment
10. Monopoly Restrictive Trade Practice Act

UNIT V

INTERNATIONAL BUSINESS ENVIRONMENT :

Foreign Capital - Concepts of FDI, FPI, FII - FEMA - Objectives and Provisions–
WTO: Functions & Objectives - AOA - GATS - TRIPS - TRIMS - Regional
Economic Integration - EU - ASEAN - NAFTA - SAARC - BRICS.

5.1 FOREIGN CAPITAL

Q1. Define foreign capital. Explain different forms of foreign capital.

Ans :

The term foreign capital is referred to the inflow of capital into the home country from international countries. In this article, you will get to know all about foreign capital, foreign investments, mainly foreign direct investment.

Different forms of Foreign Capital

A country can receive foreign capital in three different forms- foreign investment, concessional assistance, and non-concessional assistance.

1. Foreign Investment

There are two types of foreign investments- Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI). It is the foreign investment that helps the country meet the gap in management, technology, skill, and entrepreneurship.

2. Non-Concessional Assistance

This form of foreign capital consists of External Commercial borrowing (ECBs), deposits received from Non-Resident Indians (NRIs), and loans from the governments of international countries.

3. Concessional Assistance

This particular form of foreign capital consists of the loans and grants obtained on a bilateral basis from multilateral agencies like the International Monetary Fund (IMF), the World Bank, etc.

5.2 CONCEPTS OF FDI

Q2. Discuss the Concepts of FDI.

Ans :

Definition

According to the International Monetary Fund, FDI is defined as “investment made in the economy to grow significantly and also possess lasting interest in an enterprise apart from investor”.

Foreign investment acts as a significant tool for achieving higher levels of economic development of a country due to technological upgradation, optimal allocation of resources, expansion of export-markets, access into foreign goods and services and to develop a sense of competition among the Indian industries. The strong and cordial relationship between multinational firms and host countries result in ‘Foreign Direct Investment’ (FDI).

Foreign investment is said to be “direct” if the actual investor holds the power to control and to regulate his investment, whereas, if the investor does not have actual control, then the foreign investment is termed as ‘indirect’ or ‘portfolio’. The actual control should not be mis- perceived as the mere right to control the invested capital. Instead, it refers to the control of the investor over each and every aspect related to the management of FDI.

Through FDI, the investing parent company becomes a multinational company whereas, the company in which foreign investment is made is termed as an “affiliate”. The establishment of foreign affiliate and to have its control is possible by way of shareholding which can be either in cash or in kind. If the investment is of kind (machinery or infrastructure) type then its value can be computed

by estimating its cash equivalent prevailing market price. If the affiliate is totally new which means it has no investing parent company then it is termed as "green field investment". FDI can also be practised by transferring the ownership rights to the existing stakeholders if the existing domestic company is acquired by a foreign company.

In FDI, different countries will be having their own cut-off levels of foreign equity shares. Such shares are referred to those shares which can be acquired and controlled by the foreign firms. In most of the industrialized countries, this cut-off rate is found to be 10%. However, in India, about 25% of cut-off level is permissible as per the RBI guidelines. Such companies are called as foreign- controlled rupee companies whereas, those companies in which the foreign investment in equity shares are less than the cut-off level are termed as "foreign portfolio investment" or indirect investment even-though these firms can influence the decisions of an invested firm.

Q3. Explain the need and determinance of FDI.

Ans :

Need

Foreign investment is encouraged by personal interest because it has many advantages for developing countries. Foreign investment should assist in the improvement of the economy industrialisation and wealth of people.

The following factors are given in favour of foreign Investment.

1. Raising the Level of Investment

It is very essential to raise the level of investment because the developing countries want to industrialize themselves within a short period of time. As underdeveloped countries are suffering from poverty their savings are very less compared to developed countries. This needs a high level of savings in developing countries which causes a resource gap between desired investment and savings. Therefore, the foreign investment has to fill the gap between investment and savings.

2. Improvement of Technology

In comparison to developed countries, the developing countries has very low level of technology. This facilitates the developing countries to import the technology from advanced countries. Before transferring machinery and equipment to under-developed countries, foreign investment provides technological knowledge in order to operate them efficiently. It also provides required resources like management experience, entrepreneurial abilities, organisational and technological skills. In India, technical assistance received from abroad has helped in improving technology by following three ways,

- (i) Provision of expert services
- (ii) Training of Indian personnel and
- (iii) Establishing educational, research and training institutions in the country.

3. Optimal Utilisation of Natural Resources

A number of developing countries have massive mineral resources which are not utilising effectively. These countries are not capable of exploiting them maximally because of lack of technical skills. In order to exploit their mineral wealth, the under-developed countries have to depend on foreign capital.

4. Undertaking the Initial Risk

There was a lot of scarcity of private entrepreneurs in a number of developing countries. This creates obstacles in the industrial development process. An argument was proposed in favour of foreign investment that it has taken the responsibility regarding the 'risk' of investment and that helped the industrial development process. Once the industrialisation process has commenced with initiative of foreign capital there will be a lot of industrial development as more people enter into the Industrial sector.

5. Development of Basic Economic Infrastructure

It has been found that there was an inadequate/ under developed economic infrastructure in developing countries. In order to develop the basic economic infrastructure in the underdeveloped/ developing countries it needs huge capital investment. Foreign Investment played an important role by providing substantial capital to the developing countries in order to develop their basic infrastructure such as transport and communications, generation and distribution of electricity, development of irrigation facilities and so on.

Determinants

Foreign investment is mainly influenced by the following factors,

1. Political Stability

Political stability is the major factor which influences the extent and nature of foreign investment. Political instability is a situation where the government policies and political practices keeps on changing from time to time due to frequent changes in the authority. Such political instability restricts the foreign investors to make investment in those countries where government changes frequently.

2. Legal and Regulatory Framework

There are rules and regulations which constitutes legal framework and they possess major impact on the country by way of protecting property rights, capacity to transfer the repatriate profits and allowing the free market for currency exchange. There should be clear rules and regulations of the host country towards the foreign investment.

3. Size of Market

Size of the market is also one of the major factor which influence FDI as the developing countries provide huge marketing opportunities for the establishment of consumer durables. The demand of consumer goods for few products will be more than the supply for that product. In order to balance the demand and supply factors, country seeks more FDI.

4. Prices and Exchange Rate

The quantum of foreign investment in the domestic country is mainly dependent on the price and exchange rates. Foreign investors prefer those countries where the fluctuations in prices and exchange rates are considerably low.

5. Access to Basic Inputs

The quantum (or) the extent of the foreign investment in the host country depends upon the access to basic inputs like oil and gas, minerals, forestry products, skilled and unskilled labour force etc.

Q4. Explain the various costs of FDI to home and host countries.

Ans :

Cost of FDI to Host Countries

Foreign direct investment may be very advantageous to the host country that is the country which receives the investment flows in terms of helping the country progress economically and financially. However, foreign direct investment can remain beneficial only when the governments of the host countries put in needed regulations so as to prevent the country from being exploited and used as a profit generating machine for such corporate giants. The past has given many examples of how foreign direct investment can also at times be detrimental to the economy of a country.

The negative impact of FDI to host country is as follows:

1. Political Lobbying

In the past, there have been many instances in which MNCs have resorted to political lobbying in order to get certain policies and laws implemented in their favour. At times, these MNCs are so large that their revenues even exceeded the Gross Domestic Product (GDP) of some smaller nations and compel or threaten them to pass judgments and policies in their favour.

2. Exploitation of Resources

Exploitation of natural resources of a host country is not a very uncommon

phenomenon in the case of FDI. MNCs of other countries have been known to indiscriminately exploit the resources of hosts' countries in order to get short run gains and profits and have even chosen to ignore the sustainability factors associated with the local communities and local habitat, very much like what happened in the 17th century colonialism.

3. Threaten Small Scale Industries

MNCs have large economic and pricing power due to their large sizes. They do not have much problem with regards to financial capital and can hence resort to using advertising which is a costly affair. Also, these companies are global players who have their operations spread across countries and have effective supply chains which enable them to have economies of scale which smaller players in the domestic market of the host country cannot compete with. All this results in the MNC having cheaper products and more visibility due to the higher amounts of advertising and have been known to push out smaller industries out of business.

4. Technology

Although, the MNCs have access to new and cutting edge technology, they do not transfer the latest technology to the host country with a fear that their home country may lose its competitive advantage; hence the maximum potential of the host economy cannot be achieved as a result of old technology transferred.

5. Adverse Effects on Competition

The new foreign subsidiaries may grow to have more economic power and more attractively priced products than the host country companies.

6. Adverse Effects on Balance-of-Payments

If the foreign subsidiary imports large quantities - this contributes to the home country having a balance-of-payments deficit.

7. Adverse Effects on Natural Resources

Raw materials are exploited keeping in view the interest of the home country that is sometimes detrimental to the interest of the host country.

8. No Employment Opportunities

As far as employment of locals is concerned, the MNCs normally show reluctance to train the local people. Technology being normally capital-intensive does not assure larger employment.

Cost of FDI Home Countries

Foreign direct investment may be very advantageous to the home country, that is the country which provides the investment flows with respect to the profits, dividends and gains being repatriated to it, however, having operations in another country gives rise to additional risks which at times may prove very costly for the home country. The negative ways in which foreign direct investment impact the home country is as follows:

1. Undesired Outflow of Factors of Production

The cost accruing to the home country is only little. However, it cannot be denied that making of investment abroad takes away capital, skilled manpower and managerial professionals from the country. Sometimes the outflow of these factors of production is so large that it hampers the home country's interest.

2. Possibility of Conflict with the Host-Country Government

The MNCs operate in different countries in order to maximise their overall profit. To this end, they adopt various techniques that may not be in the interest of the host country. This leads to a tussle between the host government and the home government which may have a deleterious effect on bilateral relations.

3. Home Country Trade

Home country trade position may deteriorate if the FDI results on low cost goods being brought back to the home country - displacing home country goods.

Examples: A Canadian textile company moving clothing operation to Latin America results in textile workers in Canada losing their jobs, Gildan T-shirts in Honduras, Nicaragua, Haiti and the Dominican Republic.

4. Loss of Employment

Companies which invest abroad in production and marketing facilities hire labour of the foreign country; in this case, it leads to a loss of employment in the home country. Many times it is seen that MNC even close plants in their home countries and move these production facilities to third world countries in order to benefit from cheaper labour and material sourcing costs.

5. Problem of Repatriation

Many countries especially those countries which have scarce foreign exchange reserves tend to restrict the outflows of profits, dividends and royalties of the MNCs in order to save their foreign exchange for other more important purposes. In such cases, the profits or gains made in the foreign country remain there and cannot be deployed elsewhere in the event that there are more profitable opportunities available.

6. Possibility of Losing Competitive Advantage

This problem is especially true for technologically advanced developed countries. Development of new technology is a costly affair along with it requiring a significant investment of time and effort.

Many times, these technologically advanced developed countries have to license these technologies to the developing countries as a part of their FDI strategy; this give these countries access to vital information on these technologies which can be imitated by the host country.'

Q5. State the benefits of FDI to Home and Host Countries.

Ans :

(Imp.)

Benefits to Host Countries

The positive impact of FDI to the host country is now discussed below:

1. Brings in Important Factors of Production

FDI brings to the host country important factors of production such as capital, foreign exchange, skilled labour, managerial competence and willingness to bear risk. These factors supplement the domestic resources and are helpful in promoting the economic development of the host country.

2. Impact of FDI on Macroeconomic Growth

Macroeconomic growth is a potent source of poverty reduction in developing countries. FDI has a positive impact on the macro-economic growth of the host country economy. It usually influences growth by raising total factor productivity in the host economy. This operates through following two channels:

- (i) The spillovers and other externalities absorbed by the host country's business sector, and
- (ii) The direct impact on structural factors in the host country.

3. Technology Transfer

Multinational corporations are important global players in developing and using innovative technologies. They generally possess a higher level of technical know-how than what is available in developing countries. A crucial benefit of FDI is the transfer of technology from the parent company to the subsidiary or affiliate company in the host country through FDI.

4. Human Resources Development

Another benefit of FDI is the potential for enhancing the skills and knowledge of human resources of the host country. The superior managerial skills, knowledge and ability of personnel of the MNCs are passed onto host country personnel employed by them through training and on the job learning. As these persons move-on to other firms, the enhancement of human capital in the host country gains momentum.

5. Employment Generation

FDI is helpful in providing employment in the host country, thus leading to employment generation in the economy. Moreover, it is instrumental in raising labour standards in the host country towards the levels prevailing in the investors' home countries.

6. Promotion of Competitive Environment

The entry of foreign competitors in the host country acts as a spur to competition in the host country economy. Local firms attempt to raise their productivity and enhance the quality of their products to face competition from foreign MNCs. FDI thus has a positive impact on competition by creating a better competitive environment in the host country. Such competition leads to increased efficiency and productivity, lower prices and more efficient resource allocation.

7. Boosting International Trade

An important benefit of FDI for developing countries lies in its long-term contribution in integrating the host economy more closely with the world economy, leading to the growth of foreign trade of the host country. Foreign investment and foreign trade are mutually supportive. FDI thus provides a boost to the foreign trade of the host country.

8. Improvement in the Balance of Payments

FDI brings in valuable foreign exchange to the host country. The inward remittance of foreign exchange helps improve the balance of payments of the host country by enhancing the foreign exchange reserves of the country. FDI is also likely to result in import substitution and export promotion; both these measures would improve the position of the current account.

9. Improvement in the Balance of Payments

FDI helps improve the balance of payments of the host country. The inflow of investment is credited to the capital account. At the same time, the current account improves because FDI helps either import substitution or export promotion. The host country is able to produce those items that were being imported earlier.

10. Fostering of Economic Linkages

Foreign firms have forward and backward linkages. They make demand for various inputs that in turn helps develop the input-supplying industries which is known as crowding-in effect. They employ labour force and so help raise the income of the employed people that in turn raises the demand and industrial production in the country.

Benefits to Home Country

FDI or Foreign Direct Investment is defined like a firm that invests in establishing and building new branches in several other nations. This kind of international investment benefits both the organisation and also the countries where the investment is made.

For example, investing in an under-developed country offers income to local people while protecting the organisation from recessions. More impact of FDI to home country is listed below:

1. Creates New Employment

FDI benefits the home country with the creation of employment. It also assists in ensuring the workers are paid better salaries. This allows them to have an access to an improved lifestyle as well as more facilities. The manufacturing and production sector is greatly developed in the home country due to FDI investment. This increase in new industries is beneficial creating new employment.

2. New Technology

Foreign direct investment benefits the host country through introducing advanced skills and technology. New research will be conducted in that home country as the international organisation looks for methods of enhancing its services. This leads to better technology that can be applied in other parts of the nation for further development.

3. Improves Export

The other vital advantage of FDI to the home country is that it enables these nations to enhance their export resources. Furthermore, research shows that nations who get FDI from

other international organisations usually have lower interest rates. This means that their exported products are much cheaper and thus enhances export.

4. **Increases Income**

Income generated through taxation is increased by FDI investment. Actually, FDI plays an important role with regards to the increase in productivity of home countries. It improves the local economy and living standards as well.

5. **Improvement in Balance of Payment**

Inflow of foreign currencies in the form of dividend, interests etc. Nissan's profits repatriated to Japan are from its FDI in UK. They helped Japan for positive balance of payments.

6. **Industrial Activity**

FDI increases export of machinery, equipment, technology etc. from the home country to the host country. This in turn enhances the industrial activity of the home country.

7. **Learning Skills**

The firm and other home country firms can learn skills from its exposure to the host country and transfer those skills to the industry in the home country.

8. **Improved Political Relations**

FDI is a complement to foreign aid; it helps develop closer political ties between the home country and the host country which is beneficial for both the countries.

Q6. Explain the various theories of FDI.

Ans : (Imp.)

The various theories that have been introduced in favor of FDI includes the following,

(i) MacDougall-Kemp Hypothesis

Mac Dougall had proposed an earlier theory of FDI which was further developed by Kemp in 1964. According to the two country model, one country represents an investing country while the other acts as a host country. This

hypothesis states that the marginal productivity between the two countries become equal if there is a free flow of capital between the two.

This results in improving the effective utilization of resources which in turn brings improvement in the welfare of the countries. Eventhough, the output of the parent firm decreases due to FDI, the national income of the investing country remains constant because the returns earned from the invested capital becomes equal to the marginal productivity of the capital. Both the countries can see a rise in national income after their investment in foreign market till the income from the investments exceed the loss incurred in output.

(ii) Industrial Organization Theory

Generally, FDI theories are based on the assumptions of imperfect/oligopolistic markets. In these markets, there is a lot of possibility for the market imperfections such as, product development, marketing skills, managerial skills, better access to capital, technological advantage and so on, which may help the investing country to gain competitive advantage over the rivals in the host country. Such advantages enable the MNC to compensate with the costs incurred in operating the business in an unfavourable markets.

Hymer developed an earlier theory based on which he viewed that an MNC consists of all characteristics of an oligopolistic firm and have superior qualities to maintain a dominant position in the market and to gain control over the market, so as to maximize the profits. In fact, the foreign market poses certain challenges on MNCs while accessing the market which could be due to various cultural and legal aspects, comparatively less knowledge about language and consumer's wants and needs etc. Though there are number of disadvantages for an MNC operating in foreign markets, it also consists of several untapped opportunities whose exploitation helps the firm in gaining large portion of market share.

Caves (1971) proposed that for successful transmission of specific advantages from one unit to other, the MNC is required to invest in the process of production abroad rather than practising FDI through exporting/licensing.

(iii) Location-specific Theory

This theory was proposed by Hood and Young based on the importance of locational factors in the foreign investments. The assumptions of this theory include,

- (a) It is advisable for the firm which possess low cost technology to invest in those countries where the labours are cheaply available.
- (b) In order to avoid trade barriers regarding the imports, the firms investing in foreign countries have to indulge themselves into the process of production of host countries instead of importing raw materials from parent country. Because the abundant availability of raw materials could also be considered as the driving factor behind the FDI of an MNCs.

(iv) Product Cycle Theory

The product life cycle theory was developed by Raymond Vernon of Harvard Business School. It is the second firm-based theory of international trade. This theory involves four stages which are as follows,

Stage 1: New product introduction

Stage2: Growth

Stage3: Maturity

Stage4: Decline.

(v) Internalization Approach

Buckley and Carson have proposed the internalization approach. This approach is also based on the assumptions of market imperfections but according to them the imperfect situations arise as a result of variable transaction costs which would be incurred during the transfer of intermediate products (knowledge, expertise etc.) within the firm.

For international firms, the transaction cost is zero as it incurs no cost while transferring the knowledge and technology from one unit to other. Whereas, in case of interfirm transmission of technology, it is found to have been associated with high costs which affects the profits of the firm. This internalization helps the MNCs to avoid transaction costs which in turn helps in the creation of profits.

(vi) The Eclectic Paradigm

The eclectic paradigm was given by Dunning. It is a combination of imperfect market-based theories of FDI and location specific theory. The assumptions of this approach include,

- (a) The investment of any MNC in a foreign country mainly depends on the OLI configuration of the country,
 O = Represents ownership advantages
 L = Location specific advantages and
 I = Internalization advantages.
- (b) There exist variations within the composition of these advantages in different countries. If the OLI advantages are more then the investor can invest substantially large amounts in that country.
- (c) Dunning added another variable to these three variables i.e., OLI. It is a variable responsible for implementing the strategic change which is either autonomous or strategy induced.

Generally, the outcome of international production depends mostly on the strategic response of the firm and the changes in OLI configuration according to the environmental changes. This eclectic approach has a wide scope and has been tested empirically for generating satisfactory results.

(vii) Currency-based Approaches

The two factors that forms the basis for the evolution of currency based theories include the imperfect foreign exchange and capital mark.

Aliber proposed that the process of internationalization could be justified by determining the strength of different currencies. The firms whose currency is relatively strong can mobilize their funds in a weak currency country to gain high rate of returns. This theory has been empirically tested. However, it was not successful in explaining the existence of FDI in the same currency countries.

Froot and Stein also proposed another currency based theory which states that even the minute decline in the real value of country's currency may lead to a decrease in the domestic wealth thereby influencing the wealth of the foreigners. This helps the MNCs to gain the assets of the domestic firms at a very low rate.

Caves also proposed another currency based theory which states that there are two reasons or means through which the exchange rates of a country affects the FDI. They are,

- (a) The exchange rate variations help in affecting the cost and revenue of the firm. If there is an expansion in imports then there will be equal depreciation of domestic currency which in turn reduces the national income of a country. If there is an expansion in exports there will be an equivalent increase in the national income.
- (b) The variations in exchange rate influences the FDI through the generation of capital gains.

This theory does not hold good as its empirical results have revealed that there exists negative correlation between the level of exchange rate and the level of FDI in USA.

(viii) Politico-economic Theories

Politico-economic theories emphasize more on political risk and changes in political conditions of a country. The stability in the political conditions of a host country encourage the foreign investments. At the same time the instability in the political conditions of a home country will lead to high investment in foreign countries.

According to Schneider and Frey, the foreign investments are not only influenced by the political conditions but are also found to have been influenced by the economic conditions. However, the impact of economic conditions are more intense than that of political conditions.

(ix) Modified Theories for Third World Firms

All the above theories are applicable to the firms which have their subsidiaries in developing countries. These theories still require modifications to better suit the needs and requirements of the modern trends. The international firms always used to import technology from developed countries in order to meet the changing needs of the domestic markets.

The difference between product cycle theory and modified theories is that modified theories do not focus on the innovation of the products but they focus on modifying the products according to the customer preferences.

The modification is scaling-up in case of developed countries and scaling-down in case of developing countries.

Q7. Explain the policy on FDI in India.

Ans :

(Imp.)

India has among the most liberal and transparent policies on FDI among the emerging economies. FDI upto 100% is allowed under the automatic route in all activities/sectors except the following, which require prior approval of the government:

1. Activities/items that require an industrial licence.
2. Proposals in which the foreign collaborator has an existing financial/technical collaboration in India in the same field.
3. Proposals for acquisitions of shares in an existing Indian company in financial service sector and where Securities and Exchange Board of India (substantial acquisition of shares and takeovers) regulations, 1997 is attracted).

4. All proposals falling outside notified sectoral policy/CAPS under sectors in which FDI is not permitted.

The policy of FDI in India concerns the several points as follows:

1. Procedure under Automatic Route

FDI in sectors/activities to the extent permitted under automatic route does not require any prior approval either by the government or RBI. The investors are only required to notify the Regional Office concerned of RBI within 30 days of receipt of inward remittances and file the required documents with that office within 30 days of issue of shares of foreign investors.

2. Procedure under Government Approval

FDI in activities not covered under the automatic route require prior government approval. Approval of all such proposals including composite proposals involving foreign investment/foreign technical collaboration is granted on the recommendations of Foreign Investment Promotion Board (FIPB).

Application for all FDI cases, except Non-Resident Indian (NRI) investments and 100% Export-Oriented Units (EOUs), should be submitted to the FIPB Unit, Department of Economic Affairs (DEA), Ministry of Finance. Application for NRI and 100% EOU cases should be presented to SIA in Department of Industrial Policy and Promotion. Application can be made in Form FC-IL. Plain paper applications carrying all relevant details are also accepted. No fee is payable. The guidelines for consideration of FDI proposals by the FIPB are at Annexure-III of the Manual for FDI.

3. Prohibited Sectors

The extant policy does not permit FDI in the following cases:

- (i) Gambling and betting;
- (ii) Lottery business;
- (iii) Atomic energy;
- (iv) Retail trading; and

- (v) Agricultural or plantation activities of agriculture (excluding floriculture, horticulture, development of seeds, animal husbandry, pisciculture, and cultivation of vegetables, mushrooms, etc., under controlled conditions and services related to agro and allied sectors) and plantations (other than Tea plantations).

4. General Permission of RBI under FEMA

Indian companies having foreign investment approval through FIPB route do not require any further clearance from RBI for receiving inward remittance and issue of shares to the foreign investors. The companies are required to notify the concerned Regional Office of the RBI of receipt of inward remittances within 30 days of such receipt and within 30 days of issue of shares to the foreign investors or NRIs.

5. Industrial Licensing

With progressive liberalisation and deregulation of the economy, industrial licence is required in very few cases. Industrial licenses are regulated under the Industries (Development and Regulation) Act 1951. At present, industrial licence is required only for the following:

- (i) Industries retained under compulsory licensing,
- (ii) Manufacture of items reserved for small-scale sector by larger units, and
- (iii) When the proposed location attracts locational restriction.

The following industries require compulsory licence:

- (i) Alcoholic drinks,
- (ii) Cigarettes and tobacco products,
- (iii) Electronic, aerospace and defence equipment,
- (iv) Explosives, and
- (v) Hazardous chemicals such as hydrocyanic acid, phosgene, isocyanates and diisocyanates of hydro carbon and derivatives.

6. Procedure for Obtaining an Industrial Licence

Industrial licence is granted by the Secretariat for Industrial Assistance in Department of Industrial Policy and Promotion, Government of India. Application for industrial licence is required to be submitted in Form FC-IL to Department of Industrial Policy and Promotion.

7. Small-Scale Sector

An industrial undertaking is defined as small scale unit if the capital investment does not exceed ₹10 million (approximately \$222,222). The Government has reserved certain items for exclusive manufacture in the small-scale sector. Non-small-scale units can manufacture items reserved for the small-scale sector if they undertake an obligation to export 50% of the production after obtaining an industrial licence.

8. Locational Restrictions

Industrial undertakings to be located within 25kms of the standard urban area limit of 23 cities having a population of 1 million as per 1991 census require an industrial licence. Industrial licence even in these cases is not required if a unit is located in an area designated as an industrial area before 1991 or non-polluting industries such as electronics, computer software, printing and other specified industries.

Q8. Discuss the problems and consequences of foreign direct investment with reference with India.

Ans : (Imp.)

Problems of FDI

India is focusing on maximizing political and social stability along with a regulatory environment. In spite of the obvious advantages of FDIs, there are quite a few challenges facing larger FDIs in India, such as :

1. Resource challenge

India is known to have huge amounts of resources. There is manpower and significant availability of fixed and working capital. At

the same time, there are some underexploited or unexploited resources. The resources are well available in the rural as well as the urban areas. The focus is to increase infrastructure 10 years down the line, for which the requirement will be an amount of about US\$ 150 billion. This is the first step to overcome challenges facing larger FDI.

2. Equity challenge

India is definitely developing in a much faster pace now than before but in spite of that it can be identified that developments have taken place unevenly. This means that while the more urban areas have been tapped, the poorer sections are inadequately exploited. To get the complete picture of growth, it is essential to make sure that the rural section has more or less the same amount of development as the urbanized ones. Thus, fostering social equality and at the same time, a balanced economic growth.

3. Political Challenge

The support of the political structure has to be there towards the investing countries abroad. This can be worked out when foreign investors put forward their persuasion for increasing FDI capital in various sectors like banking, and insurance. So, there has to be a common ground between the Parliament and the Foreign countries investing in India. This would increase the reforms in the FDI area of the country.

4. Federal Challenge

Very important among the major challenges facing larger FDI, is the need to speed up the implementation of policies, rules, and regulations. The vital part is to keep the implementation of policies in all the states of India at par. Thus, asking for equal speed in policy implementation among the states in India is important.

India must also focus on areas of poverty reduction, trade liberalization, and banking and insurance liberalization. Challenges facing larger FDI are not just restricted to the

ones mentioned above, because trade relations with foreign investors will always bring in new challenges in investments.

Consequences of FDI

1. Impact of FDI

FDI has a widespread impact on a country not only economically but also socially. Foreign investment is always accompanied by superior technology and transfer of technical know-how. It has an impact on local industry as it provides them both opportunity and threat. It gives consumers a wide choice that too at reasonable price. FDI increases not only GDP but also exports and therefore results in higher per capita income and large forex reserves.

2. Impact on Local Industry

McKinsey studied the impact of FDI on local industry and it found that FDI unambiguously helped the receiving economy. It raised productivity and output in the sector involved thereby raising national income, while lowering prices and improving the quality and selection of services and products and consumers. FDI nearly always generated positive spillover for the rest of economy. It generated big opportunities for local manufacturers as they become OEM to them.

Hyundai and Suzuki developed ancillary units in India, Coca Cola and Pepsi developed bottling plants of world class; they gave local manufacturer an opportunity to export. Not only an opportunity for manufacturing, FDI also give technical know how to OEM which increases the level of quality. Today's Coca-Cola bottling plant are far better, in fact of international quality than those of Parle which Coca-Cola acquired.

OEMs of Maruti Suzuki not only supplies to Suzuki but also exports. McDonald's trained local farmers and bakers produce product of international quality and today they are not only supplying to McDonald's but are also exporting it. Simultaneously, it gives impetus to service industry. FDI has a big role in the development of the BPO industry in India. The entire framework of

BPO industry in India is an outcome of FDI. And today India is the most preferred nation for BPO in the world.

3. Impact on Employment

FDI in India has contributed in the creation of a more than \$10 billion-a-year software and outsourcing industry which employs 5,00,000 people directly. Projections suggest that it will employ more than 2,000,000 people by 2011-12. These are the estimates of only one industry. FDI has created jobs in every field manufacturing, telecommunication, advertising, media, and above all services.

4. Impact on Consumer

Perhaps the biggest beneficiary of the FDI is the Indian consumer. By the 1980s, we were driving Ambassador or Premier Padmini and after the investment by Suzuki, eight new models were launched. Now we have access to many international brands. Prices have been steadily decreasing in all the segments because of FDI, like electronics, computers, ACs, automobiles, and even soft drinks, two wheelers, etc. Not only this, today consumer has wider choice as these organizations are launching new variants with improved performance every day. Recently we have seen that how HLL decreased its price as a reaction to aggressive policy of P&G. Prices of ACs, Television, and Washing Machine are constantly falling down because of MNCs.

5.3 FOREIGN PORTFOLIO INVESTMENT (FPI)

Q9. What is Foreign Portfolio Investment (FPI)?

Ans :

Foreign portfolio investment (FPI) consists of securities and other financial assets held by investors in another country. It does not provide the investor with direct ownership of a company's assets and is relatively liquid depending on the volatility of the market. Along with foreign direct investment (FDI), FPI is one of the common ways to invest in an overseas economy. FDI and FPI are both important sources of funding for most economies.

- Foreign portfolio investment (FPI) involves holding financial assets from a country outside of the investor's own.
- FPI holdings can include stocks, ADRs, GDRs, bonds, mutual funds, and exchange traded funds.
- Along with foreign direct investment (FDI), FPI is one of the common ways for investors to participate in an overseas economy, especially retail investors.
- Unlike FDI, FPI consists of passive ownership; investors have no control over ventures or direct ownership of property or a stake in a company.

Q10. Who is a Foreign Institutional Investor?

Ans :

FII is an institution like a mutual fund, insurance company, pension fund etc. According to SEBI, "an FII is an institution established or incorporated outside India which proposes to make investments in India in securities". FII is an institution who is registered under the Securities and Exchange Board of India (Foreign Institutional Investors) Regulations, 1995. FIIs comprised of a pension fund, a mutual fund, investment trust, insurance company or a reinsurance company.

Q11. State the Characteristics of Foreign Portfolio Investment (FPI)

Ans :

(Imp.)

1. The primary intention is not to control a foreign business enterprise but to gain from profit making opportunities available in foreign markets.
2. FPI is represented by monetary flows from individuals, mutual funds, portfolio management companies, pension funds, equity funds etc.
3. Due to the short term nature of such investments the fund flows are less predictable.
This may result in volatility in both the foreign exchange and capital markets.
4. There is no interface between the management and the foreign investor. The transactions represent a change in ownership of existing equity from one investor to another. It has no impact on the balance sheet of the company.
5. Conventionally, all such investments represent secondary market transactions. However, regulators may permit investments through the primary market with quantitative restrictions.
6. FPI transactions result in replacement of an existing investor. Thus they do not directly contribute to economic growth. However, the greater demand for shares of the target company increases their market price leading to a higher PE Ratio. This helps the target company to raise capital at lower cost.

Q12. What are the difference between FDI and FPI.

Ans :

S.No.	Foreign Direct Investment (FDI)	S.No.	Foreign Portfolio Investment (FPI)
1.	Foreign Direct Investment is the investment made by a foreign investor in the enterprise of another country to obtain a substantial interest in that enterprise.	1.	Foreign Portfolio Investment is when an international investor invests in the passive holdings of an enterprise of another country.
2.	FDI investors play an active role in the management of the investee company	2.	FPI investors play a passive role, in the foreign company.

3.	Since the FDI investors gain both ownership and management right through investment, the level of control is relatively high.	3.	In FPI the level of control is less as the investors obtain only ownership right.
4.	Investments are difficult to liquidate. FDIs are less accessible as a large investment capital is required.	4.	They are easy to liquidate and thus can be sold. FPIs are more accessible for an average investor as the investment capital required is not very large.
5.	Entry and exit in FDIs is relatively difficult.	5.	Entry and exits in this case are easy
6.	In FDI, investment is made in physical assets and financial assets.	6.	The investment in FPIs is made in financial assets only.
7.	FDI investments are long term.	7.	FPI investments can be short term.
8.	Projects are efficiently managed.	8.	Projects are less efficiently managed.
9.	FDIs are almost always undertaken by multi national companies.	9.	FPIs come from more diverse sources, for example - a small company's pension fund or through mutual funds held by individuals; investment via equity instruments or debt of a foreign enterprise.

5.4 FII

Q13. What is FII? State its advantages and disadvantages.

Ans :

Meaning

Foreign Institutional Investors (FII) are an investment fund or a gathering of investors. Such a fund is registered in a foreign country, i.e. not in the country it is investing in. Such institutional investors mostly involve hedge funds, mutual funds, pension funds, insurance bonds, high-value debentures, investment banks etc.

Advantages

- FII's will enhance the flow of capital into the country
- These investors generally prefer equity over debt. So this will also help maintain and even improve the capital structures of the companies they are investing in.
- They have a positive effect on the competition in the financial markets
- FII help with the financial innovation of capital markets
- These institutions are professionally managed by asset managers and analysts. They generally improve the capital markets of the country.

Disadvantages

- The demand for the local currency (rupee) increases. This can cause severe inflation in the economy.

- These FII's drive the fortune of big companies in which they invest. But their buying and selling of securities have a huge impact on the stock market. The smaller companies are taken along for the ride.
- Sometimes these FII's seek only short-term returns. When they pull their investments banks can face a shortage of funds.

Q14. Distinguish between FDI and FII.

Ans :

S.No.	PARAMETER	FDI	FII
1	Meaning	Here when the Investment in any Indian company by a foreign company is either located or incorporated in a foreign nation.	Here, when the Investment is done in the Indian stock market by any foreign investor.
2	Tenure of investment	This is usually long-term (in years) in nature.	Investments are short-term (in months) in nature.
3	Ease of investment	It is not easy for firms and corporations to enter and exit the market.	It is easy for the firms involved in the FII to enter and exit the market.
4	Benefits for the investee company	The benefits received by these companies are much more than capital. They receive technical and strategic knowledge.	The benefits received by these companies are only capital.
5	Targeted investment	They target specific companies and industries.	There is no such target. The investment undertaken here flows into the financial market.
6	Impact of investment	The investments from this form of investment are mostly beneficial for the entire cost leading to an increase in the GDP.	The impact of this form of investment leads to an increase in the capital of the company.
7	Transfer of control or of influence	FDI provides transfer of control over the company.	FII does not provide any form of control over the company.
8	Entry and Exit	Government approval is authorized for entry and exit	No approval is required

5.5 FEMA**5.5.1 Objectives**

Q15. What is FEMA? Discuss its objectives.

Ans :

Meaning

In 1999, Foreign Exchange Management Act (FEMA) was brought to replace Foreign Exchange Regulation Act (FERA), 1973. The purpose of FERA was to regulate the conducting of the business of Indian companies in foreign markets and foreign companies in the Indian market. FEMA was brought into effect from January 1, 2000. This act applies to every office, branch or agency in India and also to the foreign offices and branches of people who are the Indian residents.

FEMA was framed by the Indian Government and is directly associated with the foreign direct investment in the economy. FEMA has a crucial role to play in facilitating external payment and trade.

Hence, FEMA is an Act of the Parliament of India “to consolidate and amend the law relating to the foreign exchange with the objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India.”

The main Objectives of FEMA are as follows:

- To amend and consolidate FERA.
- To assist in external payments and trade.
- To facilitate the systematic development of the Indian foreign exchange market.

5.5.2 Provisions

Q16. Explain the Provisions of FEMA.

Ans :

The Act extends to the whole of India. It is highly user-friendly and seeks to promote foreign trade and facilitate payments.

Following are a few provisions of FEMA:

➤ **Section 3: Dealing in Foreign Exchange**

No person shall deal in or transfer any foreign exchange or foreign security to any person; make any payment to or to the credit of any person resident outside India in any manner; receive any payments by order or on behalf of any person resident outside India in any manner; and enter into any financial transaction in India as consideration for or in association with acquisition, creation or transfer of the right to acquire any asset outside India by any person, without permission from the Reserve Bank.

➤ **Section 4: Holding of Foreign Exchange**

No person, resident in India, shall acquire, hold, own, possess or transfer any foreign exchange, foreign security or any immovable property situated outside India, without permission from the Reserve Bank.

➤ **Section 5: Current Account Transactions**

Any person may sell or draw foreign exchange to or from an authorised person if such sale or drawal is a current account transaction.

➤ **Section 6: Capital Account Transactions**

Any person may sell or draw foreign exchange to or from an authorised person for a capital account transaction.

The Reserve Bank may, in consultation with the Central Government, specify any class or classes of capital account transactions which are permissible and limit upto which foreign exchange shall be admissible for such transactions.

➤ **Section 7: Export of Goods and Services.**

Every exporter of goods or services shall furnish to the Reserve Bank details regarding the export value of such goods or services.

➤ **Section 8: Realisation and Repatriation of Foreign Exchange.**

Where any amount of foreign exchange is due or accrued to any person resident in India, such a person shall take steps to realise and repatriate to India, such foreign exchange within a specified period of time.

➤ **Section 9: Exemption from Realisation and Repatriation.**

The following are exempted from the operation of Section 4 and Section 8 :

- (a) possession of foreign currency or foreign coins by any person upto such limit as the Reserve Bank may specify;
- (b) foreign currency account held or opted by such person or class of persons and the limit upto which the Reserve Bank may specify;
- (c) foreign exchange acquired or received before the 8th day of July, 1947 or any income arising or accruing thereon which is held outside India by any person in pursuance of a general or special permission granted by the Reserve Bank;
- (d) foreign exchange held by a person resident in India upto such limit as the Reserve Bank may specify, if such foreign exchange was acquired by way of gift or inheritance from a person referred to in clause (c) including any income arising therefrom;
- (e) foreign exchange acquired from employment, business, trade, vocation, services, honorarium, gifts, inheritance or any other legitimate means upto such limits as the Reserve Bank may specify and
- (f) such other receipts in foreign exchange as the Reserve Bank may specify.

Q17. Distinguish between FERA and FEMA.

Ans :

(Imp.)

Sr. No	Nature	FERA	FEMA
1	PROVISIONS	FERA consisted of 81 sections, and was more complex	FEMA is much simple, and consist of only 49 sections.
2	FEATURES	Presumption of negative intention (Mens Rea) and joining hands in offence (abatement) existed in FEMA	These presumptions of Mens Rea and abatement have been excluded in FEMA
3	NEW TERMS IN FEMA	Terms like Capital Account Transaction, current Account Transaction, person, service etc. were not defined in FERA.	Terms like Capital Account Transaction, current account Transaction person, service etc., have been defined in detail in FEMA
4	DEFINITION OF AUTHORIZED PERSON	Definition of "Authorized Person" in FERA was a narrow one (2(b)	The definition of Authorized person has been widened to include banks, money changes, off shore banking Units etc. (2 (c)
5	MEANING OF "RESIDENT" AS COMPARED WITH INCOME TAX ACT.	There was a big difference in the definition of "Resident", under FERA, and Income Tax Act	The provision of FEMA, are in consistent with income Tax Act, in respect to the definition of term" Resident". Now the criteria of "In India for 182 days" to make a person resident has been brought under FEMA. Therefore a person who qualifies to be a non-resident under the income Tax Act, 1961 will also be considered a non-resident for the purposes of application of FEMA, but a person who is considered to be non-resident under FEMA may not necessarily be a non-resident under the Income Tax Act, for instance a business man going abroad and staying therefore a period of 182 days or more in a financial year will become a non-resident under FEMA.
6	PUNISHMENT	Any offence under FERA, was a criminal offence , punishable with imprisonment as per code of criminal procedure, 1973	Here, the offence is considered to be a civil offence only punishable with some amount of money as a penalty. Imprisonment is prescribed only when one fails to pay the penalty.
7	QUANTUM OF PENALTY.	The monetary penalty payable under FERA, was nearly the five times the amount involved.	Under FEMA the quantum of penalty has been considerably decreased to three times the amount involved.
8	APPEAL	An appeal against the order of "Adjudicating office", before " Foreign Exchange Regulation Appellate Board went before High Court	The appellate authority under FEMA is the special Director (Appeals) Appeal against the order of Adjudicating Authorities and special Director (appeals) lies before "Appellate Tribunal for Foreign Exchange." An appeal from an order of Appellate Tribunal would lie to the High Court. (sec 17,18,35)
9	RIGHT OF ASSISTANCE DURING LEGAL PROCEEDINGS.	FERA did not contain any express provision on the right of on impleaded person to take legal assistance	FEMA expressly recognizes the right of appellant to take assistance of legal practitioner or chartered accountant (32)
10	POWER OF SEARCH AND SEIZE	FERA conferred wide powers on a police officer not below the rank of a Deputy Superintendent of Police to make a search	The scope and power of search and seizure has been curtailed to a great extent

Q18. What is capital account transaction? Discuss the role of FEMA in regulating capital and current account transactions.

Ans :

(A) Capital Account Transaction

Section 2(e) states that 'Capital Account Transaction' means:

- A transaction that alters the assets or liabilities, including contingent liabilities outside India of a person residing in India.
- A transaction that alters the assets or liabilities in India of persons residing outside India.
- Transfer or issue of any foreign security by a person residing in India.
- Transfer or issue of any security by a person residing outside India.
- Transfer or issue of any security or foreign security by any branch, office or agency in India or a person residing outside India.
- Any borrowing or lending in foreign exchanges in whatever form or by whatever name known.
- Any borrowing or lending in rupees in whatever form or by whatever name known between a person residing in India and a person residing outside India.
- Deposits between persons residing in India and person residing outside India.
- Export, import or holding of currency or currency notes.
- Transfer of immovable property outside India, other than lease not exceeding five years, by a person residing in India.
- Acquisition or transfer of immovable property in India, other than a lease not exceeding five years, by a person resident outside India.
- Giving of guarantee or surety in respect of any debt, obligation or other liability incurred, by a person residing in India and owed to a person residing outside India, by a person residing outside in India.

Regulation of Capital Account Transaction

Subject to the provision of sub-section (2), any person may sell or draw foreign exchange to or from an authorised person for a capital account transaction.

The RBI may, in consultation with the Central government, specify:

1. Any class or classes of capital account transaction that are permissible;
2. The limit up to which foreign exchange shall be admissible for such transactions.

Provided that the RBI shall not impose any restrictions on the withdrawal of foreign exchange for payments due on account of amortisation of loans for depreciation of direct investment in the ordinary course of business.

Without prejudice to the generality of the provision of sub-section (2), the Reserve Bank may, by regulations prohibit, restrict or regulate the following:

1. Transfer or issue of any foreign security by a person residing in India.
2. Transfer or issue of any security by a person residing outside India.
3. Transfer or issue of any security or foreign security by any branch, office or agency in India of a person residing outside India.
4. Any borrowing or lending in foreign exchange in whatever form or by whatever name known.
5. Any borrowing or lending in rupees in whatever form or by whatever name known between a person residing in India and a person residing outside India.
6. Deposits between persons residing in India and persons residing outside India.
7. Export, import or holding of currency or currency notes.
8. Transfer of immovable property outside India, other than lease not exceeding five years, by a person residing in India.
9. Acquisition or transfer of immovable property in India, other than a lease not exceeding five years by a person residing outside India.

10. Giving a guarantee or surety in respect of any debt, obligation or other liability incurred:

- (i) By a person residing in India and owed to a person residing outside India; or
- (ii) By a person residing outside India.

FEMA has eased the regulation over transactions in foreign exchange and security. Transactions in current account have been made restrictions-free:

No restriction on current account transaction unless specified: Any person can sell or draw foreign exchange to or from authorised persons if such sale or withdrawal is a current account transaction. Reasonable restrictions on current account transaction can be imposed by the Central government in public interest, in consultation with the RBI.

(B) Current Account Transaction:

Section 2(j) states that current account transaction means a transaction other than a capital account transaction. It includes the following:

1. Payment due in connection with foreign trade, other current businesses, services and short-term banking, and credit facilities in the ordinary course of business.
2. Payment due as interest on loans as net income from investment.
3. Remittances for living expenses of parents, spouse and children residing abroad.
4. Expense in connection with foreign travel, education and medical care of parents, spouse and children.
5. The definition is 'inclusive', i.e., besides aforesaid expenses, any expenditure that is not a 'capital account transaction' will be a current account transaction. For examples, expenditure incurred on own expenses on foreign travel, education, and medical care are covered as 'current account transaction' not specified above.
6. Any person may sell or withdraw foreign exchange to or from an authorised person if such sale or drawal is a current account transaction.

(i) Foreign Currency/Security/Property by Resident :

A person resident in India may hold, own transfer or invest in foreign currency, foreign security or any immovable property situated outside India, if such currency, security or property was acquired, held or owned by such person when he was residing outside India or inherited from a person who was residing outside India [section 6(4)].

(ii) Indian Currency/Security/Property by Non-resident :

A person residing outside India may hold, own, transfer or invest in Indian currency, security or any immovable property situated in India if such currency, security or property was acquired, held or owned by such person when he was residing in India or inherited from a person who was residing in India. [Section 6(4)].

(iii) Restrictions on Branches, Offices of Non-residents :

The RBI may prohibit, restrict or regulate establishment of branch, office or other place of business by a person residing outside India; for carrying on any activity relating to such branch, office or other place of business. [Section 6(6)].

Q19. Discuss how the directorate of enforcement puts FEMA into effect.

Ans :

(i) Directorate of Enforcement

The Directorate of Enforcement has been formed to ensure that the provisions of the Act are adhered to. In the Directorate of Enforcement, an Additional Director, a special Director and Assistant Directors of Enforcement are appointed by the Central govt., under section 36.

These officers can investigate contraventions of FEMA. They have powers similar to those conferred on Income Tax authorities under the Income Tax Act. These powers can be exercised subject to limitations laid down under Income Tax Act. (Section 37)

The following powers are available under the Income Tax Act - powers to requisition books of accounts, power to call for information, power to inspect registers of companies [Sections 131 to 136 of Income Tax Act].

(ii) Penalties under the Act

An Adjudicating Authority appointed by the Central Government under FEMA can impose penalties for violating any provision of the Act or contravention of any rule, regulation, direction or order issued under the power conferred by the Act.

(iii) Departmental Adjudication

The Central government can authorise certain officers as Adjudicating Authority' under Section 16(1). Their jurisdiction will be prescribed by the Central government [Section 16 (2)]. They can adjudicate cases in respect of violation of FEMA. These officers are quasi-judicial and have to follow the principle of natural justice by giving the opportunity of making representation. The Adjudicating Authority can hold an enquiry only upon receiving a complaint from an authorised officer [Section 16 (3)].

(iv) Powers of Adjudicating and Appellate Authorities

The adjudicating authority, Special Director (Appeals) and Appellate Tribunal have the following powers of the civil court:

1. Summoning witnesses and enforcing attendance of any person and examining them on oath.
2. Requiring discovery and production of any document.
3. Receiving evidence on affidavits.
4. Requisition of any public record or document or copy of such record/ document from any office (subject to sections 123 and 124 of the Indian Evidence Act).
5. Reviewing its decisions.
6. Dismissing a representation of default or deciding it ex parte.

7. Setting aside any order of any representation for default or any order passed by it ex parte.
8. Any other matter as may be prescribed by the Central government.

5.6 WTO

5.6.1 Functions & Objectives

Q20. Explain briefly about WTO.

Ans : **(Imp.)**

Introduction

The formation of WTO on 1st January, 1995 was regarded as the greatest reform of international trade, since 1948. Initially, international commerce was under the guidance of GATT which assisted in developing a productive multilateral trading system. However, it needed examination by the end of 1980's.

The Uruguay round was conducted for performing the examination. This negotiation was one of the largest trade negotiations. Initially, some people felt that Uruguay round would fail but, at the end it was successful. WTO includes many things along with GATT. GATT was considered as a small and provisional institution which was not recognized as an international organization. GATT is now replaced with WTO. The agreement of GATT was modified and transformed into the new WTO agreements. GATT deals only with trade in goods, whereas WTO agreements involves service and intellectual property.

Development of WTO

The Uruguay round was the eighth round of multilateral trade negotiations held under GATT and continued for seven years. The Uruguay round led to the development of new legal agreements for trade and reinforced the settlement system.

A ministerial conference was conducted in Marrakesh Morocco in April 1994, in which 125 government representatives participated from all around the world for signing the formation of a new successor institution to GATT i.e., the World Trade Organization (WTO). It is an embodiment of the Uruguay round results. On 1st January, 1995, when WTO came into existence all the assets and liabilities of GATT were transferred to WTO.

Geneva was considered as its headquarters. WTO committees replaced all the GATT committees. In the beginning, there were four subcommittees which are as follows,

1. Finance, administration and budget
2. Institutional, procedural and legal matters
3. Trade and environment
4. Services.

WTO makes sure that every member country will negotiate with its trading partners for the purpose of making an entry into the multilateral trading system and gaining a schedule for goods and services which is convenient for market. All the member countries makes significant efforts for ending the domestic rectification of the WTO agreement quickly.

Q21. What is meant by GATT ? Explain the objectives of GATT.

Ans :

Introduction

The General Agreement on Trade and Tariffs was formed in 1947. The main objective behind the formation of GATT was to liberalize the trade globally. The Bretton Woods Conference of 1944, suggested the formation of International Monetary Fund (IMF), World Bank and International Trade Organization (ITO). Even though, the IMF and World Bank was formed in 1946, the ITO charter was not approved due to the arguments that its enforcement provisions will intervene with the power of domestic policy making. So, till the ITO charter was approved, the GATT which was established as a provisional agreement in 1947 for reducing the gap between the countries, became the underlying structure for international trading system.

GATT was modified into a World Trade Organization (WTO) which came into effect from 1st January, 1995. WTO is more stronger and powerful than GATT and performs several functions.

Objectives

The main aim of GATT was to increase international trade by eliminating restrictions on

trade for attaining economic growth all over the world. The opening statement of the GATT outlined the following objectives as the primary objectives of GATT.

1. To increase the standard of living of the people all over the world.
2. To make sure that there is full employment and uniform growth in the real income all over the world.
3. To make effective utilization of the resources.
4. To increase the production and international trade.

GATT includes some conventions and general principles which controls international trade between the countries which are tied up in the agreement.

According to the rules of conventions of GATT,

- (i) The tariff or any other commercial policy of a member country cannot be changed without consulting other parties of the agreement.
- (ii) The countries which are included in GATT must aim at decreasing the tariffs and other trade barriers.

Q22. What are the principles of GATT ?

Ans :

1. Non-discrimination

The non-discrimination principle states that there shall be no discrimination between the member countries while conducting the global business.

In order to follow the principle of non-discrimination, the member countries of GATT have made an agreement to apply the Most Favoured Nation (MFN) on all its custom and excise duties with an exception that the quantitative restrictions would be applicable on all the member countries.

Another exception was that the GATT allows for economic integration only when

the integration aims at increasing the trade among the member countries and reduces or removes the trade barriers of the other countries.

2. Prohibition of Quantitative Restrictions

GATT prevents the quantitative restrictions and restricts the trade to the less rigid tariffs. There exists few exceptions to this principle i.e., it prevents quantitative restrictions to the countries who are suffering from the problem of balance of payment and also to the third world countries.

Besides this, certain significant restrictions were made applicable on agricultural and fishery products where the local production of such products was subjected to equivalent restrictive production or marketing controls.

3. Consultation

All the GATT disagreements were resolved with the help of continues consultation. Till date, eight trade negotiations were conducted under the guidance and protection of GATT.

All the rounds of GATT took many years to complete. The last round i.e., the Uruguay round took nearly seven years to draw a conclusion, while the estimated time of the round was more than four years.

Q23. Explain the organization structure of WTO.

Ans : (Imp.)

The WTO is operated by the government's of the member countries. WTO is a member driven, consensus -based organization in which the important decisions are taken by consensus by the members as a whole either by ministers or their ambassadors. There are four hierarchical levels in the organizational structure of the WTO. The following are the hierarchies of WTO from top to bottom,

1. Ministerial Conference

Ministerial conference is on the top of hierarchy in the organizational structure of

WTO. It is represented by all the member countries of WTO. Ministerial conference has the power to make the decisions on all the matters of multilateral trade agreements. Usually, ministerial conference meets once in two years. Hence, ministerial conference is a body which develops strategies and policies, these strategies and policies are performed by the next level i.e., general council.

2. General Council

General council acts as an executive body of WTO which discloses its decisions and activities to the ministerial conference. General council is also represented by all the members of WTO, it has two different forms which are as follows,

- (i) Dispute settlement body controls the dispute settlement procedures and is guided by the dispute settlement panels and appellate body.
- (ii) Trade policy review body examines the trade policies of individual WTO members regularly.

3. Councils

In the hierarchy of the organizational structure of WTO, the third level is occupied by the councils. Usually, councils are of three types they are,

- (a) **Councils for Trade in Goods:** The authority of implementing and operating all the agreements which are related to trade in goods is held with the council for trade in goods.
- (b) **Councils for Trade in Services:** The implementation of all the agreements relating to trade in services is supervised by the council for trade in services.
- (c) **Council for Trade Related Intellectual Property Rights:** In this council, the implementation and the operations of all agreements relating to intellectual property rights are supervised.

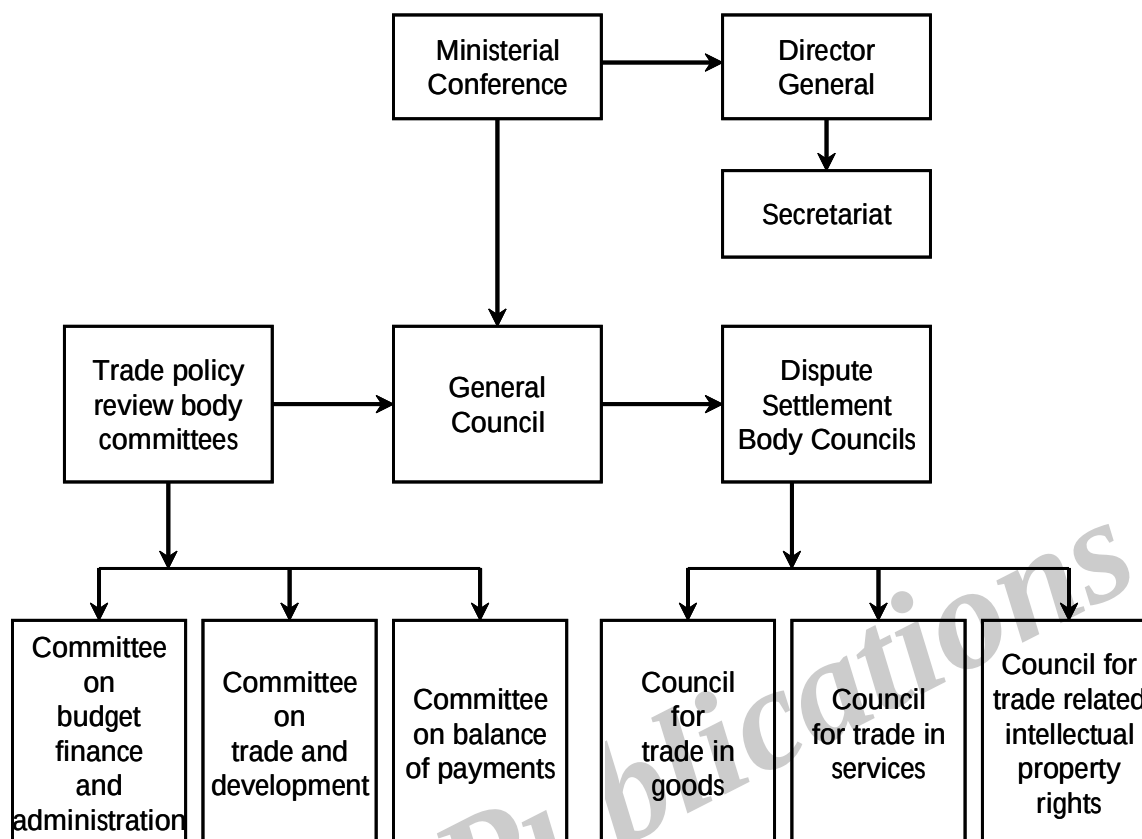


Fig.: Organizational Structure of WTO

4. Committee and Management Bodies

The committees and management bodies are held with the responsibilities, power and authorities which are transferred by the general council. The following are the different committees and the management bodies,

- (i) **Committees:** The councils establishes the committees for organizing the arrangements, ministerial conference created three committees which are as follows,
 - (a) **Committee on Trade and Development:** This committee deals with all the problems or issues relating to the developing countries and specifically least developed countries.
 - (b) **Committee on Balance of Payments:** In order to solve the problems of balance of payments, some member countries of WTO adopts trade restrictive measures. The committee on balance of payments makes arrangements for conducting meetings among these countries.
 - (c) **Committee on Budget, Finance and Administration:** All the matters relating to the budget, finance and administration of WTO are handled by this committee.
- (ii) **Management Bodies:** In WTO, the plurilateral agreements have their own management bodies which are accountable to general council. Some plurilateral agreements which have their management bodies are civil air-craft, government procurement, dairy products, bovine-meat, etc.

5.6.2 Objectives and Functions of WTO**Q24. Explain the objectives and functions of WTO.**

Ans : (Imp.)

Objectives

Important objectives of WTO are mentioned below:

- (i) To implement the new world trade system as visualized in the Agreement.
- (ii) To promote World Trade in a manner that benefits every country.
- (iii) To ensure that developing countries secure a better balance in the sharing of the advantages resulting from the expansion of international trade corresponding to their developmental needs.
- (iv) To demolish all hurdles to an open world trading system and usher in international economic renaissance because the world trade is an effective instrument to foster economic growth.
- (v) To enhance competitiveness among all trading partners so as to benefit consumers and help in global integration.
- (vi) To increase the level of production and productivity with a view to ensuring level of employment in the world.
- (vii) To expand and utilize world resources to the best.
- (viii) To improve the level of living for the global population and speed up economic development of the member nations.

Functions

The WTO provides the common institutional framework for the conduct of trade relations among its Members in matters related to the Agreements negotiated during the Uruguay Round. It monitors and oversees, through its various bodies, the implementation, operation and administration of the various agreements. It also administers the trade policy review mechanism and the dispute settlement mechanism. In addition, the WTO provides the forum for further negotiations between its Members,

in matters dealt with under the Agreements and also more generally concerning their multilateral trade relations:

- 1. Implementation, administration and operation of the covered agreements:** The WTO facilitates the implementation, administration and operation of the WTO Agreement and the Multilateral Trade Agreements, and furthers their objectives. It also provides the framework, for those of its Members that have accepted them, for the implementation, administration and operation of the Plurilateral Trade Agreements.
- 2. Forum for negotiations:** The WTO provides the forum for negotiations on multilateral trade relations in matters covered by its various agreements. It may also, on decision by the Ministerial Conference, provide a forum for further negotiations, and a framework for the implementation of their results, on other issues arising in the multilateral trade relations among its Members.
- 3. Dispute settlement:** The WTO administers the integrated dispute settlement system, which is a central element in providing security and predictability to the multilateral trading system, serving to preserve the rights and obligations of the Members of the WTO.
- 4. Review of national trade policies:** The WTO administers the Trade Policy Review Mechanism, which is designed to contribute to greater transparency and understanding of the trade policies and practices of WTO Members, to their improved adherence to the rules, disciplines and commitments of the multilateral trading system, and hence to the smoother functioning of the system.
- 5. Coherence in global economic policy-making:** A Ministerial Declaration adopted at the Marrakesh Ministerial Meeting recognizes the role of trade liberalization in achieving greater coherence in global economic policy-making. For this purpose, the WTO cooperates, as appropriate, with the International Monetary Fund and with the World Bank.

Q25. What are the principles of WTO ?

Ans :

The WTO agreements are elaborated and difficult in nature as they are legal and includes great variety of activities. The WTO agreements are basically concerned with agriculture, textiles and clothing, industrial standards and product safety, food sanitation regulations, intellectual property and so on. Few primary/fundamental principles are followed for all these documents. These primary principles acts as the foundation/basis of WTO. The principles are as follows,

1. Non-discrimination

This principle is framed on the basis of the concept of normal trade relations, earlier known as the Most Favoured Nation (MFN) rule. According to this rule, the WTO members must provide the similar favourable trade terms to all the members as the ones which they have provided to any individual member. The principle of non-discrimination is beneficial to importers and consumers as they can make use of low cost goods regardless of the country in which they are being produced. Another important perspective of principle of non-discrimination is the national treatment. National treatment integrates all the member countries in order to consider the imported and local goods equally. The national treatment can be implemented only after the product, service or an item of intellectual property enters the market.

2. Transparency

Transparency is one of the essential pillar of WTO. The WTO members are supposed to publish their trade regulations in order to create and sustain those institutions which monitors the administrative decisions, which influences the trade, to give response to information appeals made by the other members and to inform about the changes of the trade policies to the WTO. Continuous checking of the monitoring of the national

trade policies with the help of trade policy review mechanism, results in acting as a sources of increasing transparency both at the domestic level as well as at the multilateral level.

3. Binding and Enforceable Commitments

In the WTO, when the countries enters into a mutual agreement of opening their markets for goods and services then in that case they bind their commitments. The bindings amount with respect to the goods refers to the highest limit of customs tariff rates. Mostly, the developing countries charge tax on the imports at the lower rates than the bond rates. While the developed countries, rates the charges same as the bond rates. A country can make alternations in its bindings but only after negotiating with its trading partners, which would either result in compensating the trading partners for the loss that they incur.

4. Reciprocity

Reciprocity functions at the time of negotiating between the countries wherein the governments negotiate in the WTO rounds. Reciprocity is carried out with the intention of achieving mutually beneficial arrangements with the help of reciprocal deductions in the tariff bindings. In short, the government identifies those negotiators who are looking for balance of concessions, wherein the tariff deductions are provided by one country is balanced against an equal concession from its trading partner.

5. Safety Values

Safety value principle is the one which explains that the government must be able to restrict the trade under certain conditions. There are four types of provisions with respect to this principles. They are,

- (i) Those goods and services which are produced for the non-economic objective like public health and national security.
- (ii) Industries which may be damaged through competition of imports.

- (iii) The articles which aims at assuring fair competition. The following measures would be used in such a condition, the right to impose countervailing duties on imports which have been subsidized and the anti-dumping duties on imports, which needs to be dumped.
- (iv) Provisions allowing intervention in trade for economic criterias. The economic criterias consists of the measures to correct the balance of trade or the wish to safeguard the infant industry.

Q26. Compare and contrast GATT and WTO.

Ans :

(Imp.)

S.No.	Nature	GATT	WTO
1.	Institution	GATT was associated in a small secretariat without institutional foundation.	WTO is a permanent institution with its own secretariat.
2.	Agreements	GATT agreements were provisional.	WTO agreements are permanent.
3.	Commitments	GATT was applied on a "Provisional basis", even if, after more than 40 years, government choose to treat it as a permanent commitment.	WTO commitments are full and permanent.
4.	Coverage	GATT rules were applied to trade in merchandise goods only.	WTO is a wide aspect which covers not only trade in goods but also in services and intellectual property.
5.	Instrument	GATT was based on selective nature as it included both Multi-lateral and Plurilateral instruments/ agreements.	Agreements under WTO are almost multilateral, leading to full commitments for the entire membership.
6.	Dispute Settlement System	Disputes under GATT were not settled fast.	WTO is based on more automatic system which shall settle disputes very fast.
7.	Parties / Members	GATT had contracting parties.	WTO has members.
8.	Power	GATT was less powerful and narrow scope which concentrated only on trade in goods.	WTO is more powerful and broader in scope as it consists of services and intellectual property in addition to goods.

5.6.3 Agreement on Agriculture (AOA)

Q27. Explain briefly about agreement on agriculture (AOA).

Ans : (Imp.)

GATT allows countries to use some non-tariff measures such as import quota and subsidies. The Uruguay Round produced the first multilateral agreement dedicated to the Agriculture sector. It was implemented over a six-year period and for developing nations that began in 1995.

Tariff on Agriculture

Tariff on all agricultural products are now bound. Almost all import restrictions besides tariffs have been converted to tariffs, a process known as "tariffication". The first step in "tariffication" is to replace these restrictions with a tariff that represents about the same level of protection. Then, over six years from 1995 to 2000, the tariff gradually reduced (the reduction period for developing countries end in 2005). In addition, it includes countries' commitment to reduce domestic support and export subsidies on agricultural product.

The new rules and commitment apply to :

1. Market Access

The WTO supports tariffication in the field of Agriculture. It has replaced all non-tariff barriers in the field of agriculture by Tariffs giving the same level of protection as provided by the previous policy.

Even for the product whose tariffication has been done, the governments were allowed to take special emergency action ("special safeguard") in order to prevent falling prices or urge in import from hurting their farmer.

Four countries used the "special treatment" provision to restrict import of particular products, mainly rice, during the implementation period (to 2000 for developed countries, to 2004 for developing ones). These four countries were: Japan, South Korea, and the Philippine for rice; and Israel for sheepmeat, wholemilk powder and certain varieties of cheese.

2. Domestic Support

The Agriculture Agreement distinguishes between agriculture support programmes of Govt, as policies that do not have a direct effect on production and trade that do have a direct impact. Policies which have a direct impact on production and trade have to be cut back.

This category of domestic support is sometimes called the "amber box."

Measures that have minimal impact on trade can be used freely they are in a "green box". They include government services such as research, disease control, infrastructure, and food security. They also include payment made directly to the farmer that do not stimulate production, such as certain forms of direct income support, assistance to help farmers in restructuring agriculture and direct payment under environmental and regional assistance programme.

Also permitted, are certain direct payments to farmers. Here the farmers are required to limit production (sometimes called "blue box" measure), certain government assistance programmes to encourage agricultural and rural development in developing countries, and other support on a small scale ("de minimis") when compared with the total value of the product or product supported (5% or less in the scale of developed countries and 10% (or) lesser for developing countries).

3. Export Subsidies

The Agriculture Agreement prohibits export subsidies on agricultural products except those specified in a member's list of commitment. Even if they are listed, the agreement requires WTO members to cut both the amount of money they spend on export subsidy and the quantities of export that receive subsidies.

Taking the average for 1986-90 at the base level, developed countries agreed to cut the value of export subsidies by 36% over the six years starting in 1995 (24% over 10

years for developing countries). During the six-year implementation period, developing countries are allowed, under certain conditions, to use subsidies to reduce the cost of marketing and transporting export.

WTO makes certain measures for the provision of food aid and aid for agricultural development of the least developed and poor countries because they cannot afford costly imports and need assistance to export.

5.6.4 General Agreement on Trade in Services (GATS)

Q28. Explain briefly about General Agreement on Trade in Services (GATS)

Ans :

The General Agreement on Trade in Services (GATS), negotiated during the Uruguay round, is the first step of multilaterally Agreed and legally enforceable rules and disciplines ever negotiated to cover international trade in services. The agreement contains three elements: A Framework of general rules and disciplines, Annexes addressing special conditions relating to individual sectors (the sectors covered are movement of natural persons, cross-border trade, consumption abroad, and commercial presence) and National schedules of market access commitments. A council for trade in services oversees the operation of the agreement.

The General Agreement on Trade in Services (GATS) which extends multilateral rules and disciplines to services is regarded as a landmark achievement of the Uruguay Round (UR), although it achieved only little in terms of immediate liberalization. On account of the special characteristics and the socio-economic and political implications of certain services, they have been generally subject to various types of national restrictions. Protective measures include visa requirements, investment regulations, restrictions on repatriation, marketing regulations, restrictions on employment of foreigners, compulsions to use local facilities, etc. Heavily protected services in different countries include banking and insurance; transportation; television, radio, film and other forms of communication, and so on.

The GATS defines services as the supply of a service:

1. From the territory of one member (country) into the territory of any other member.
2. In the territory of one member to the service consumer of any other member.
3. By a service supplier of one member, through commercial presence in the territory of any other member,
4. By a service supplier of one member, through presence of natural persons of a member in the territory of any other member,

The GATS expressly recognises the right of members to regulate the supply of services in pursuit of their own policy objectives, and does not seek to influence these objectives. Rather, the Agreement establishes a framework of rules to ensure that services regulations are administered in a reasonable, objective and impartial manner and do not constitute unnecessary barriers to trade.

Q29. State the various modes of General Agreement on Trade in Services.

Ans :

Modes of GATS

The GATS covers four modes of international delivery of services:

1. **Cross-border Supply (Trans-border Data Flows, Transportation Services)**
Cross-border supply is defined to cover services flows from the territory of one Member into the territory of another Member (e.g., banking or architectural services transmitted via telecommunications or mail).
2. **Commercial Presence (Provision of Services Abroad through FDI or representative offices)**

Commercial presence implies that a service supplier of one member establishes a territorial presence, including through ownership or lease of premises, in another member's territory to provide a service (e.g., domestic subsidiaries of foreign insurance companies or hotel chains).

3. Consumption Abroad (Tourism)

Consumption abroad refers to situations where a service consumer (e.g., tourist or patient) moves into another member's territory to obtain a service.

4. Movement of Personnel (Entry and Temporary Stay of Foreign Consultants)

Presence of natural persons consists of persons of one member entering the territory of another member to supply a service (e.g., accountants, doctors or teachers). The Annex on Movement of Natural Persons specifies, however, that members remain free to operate measures regarding citizenship, residence or access to the employment market on a permanent basis.

Apart from the traditional concept of cross-border trade, three additional modes of supply and the supply of many services is possible only through the simultaneous physical presence of both producer and consumer.

There are thus many instances in which, in order to be commercially meaningful, trade commitments must extend to cross-border movements of the consumer, the establishment of a commercial presence within a market, or the temporary movement of the service provider himself.

Q30. What are the various services covered by General Agreement on Trade in Services.

Ans :

The GATS practically covers all types of services. The services covered are currently classified under the following twelve broad sectors, each divided into several sub-sectors:

1. Business Services

Professional services, including legal services, accounting, auditing and book-keeping, architectural and real estate services, engineering services, medical and dental services, veterinary services, other professional services, computer and related services, research and development services, real

estate services and rental/leasing services and other business services, such as management consultancy, advertising, technical testing, maintenance and repair, packaging and printing services, convention services, cleaning services.

2. Communication Services

All forms of basic and value-added telecommunication services, including online information and data processing services postal and courier services audio-visual services: radio and television services, motion picture and video tape production and distribution services, satellite communication.

3. Construction and Related Engineering Services

General construction work for buildings, general construction work for civil engineering, installation and assembly work, building completion and finishing work.

4. Distribution Services

Including retail, wholesale, and franchising.

5. Educational Services

Primary education, secondary education services, higher education services, adult education.

6. Environmental Services

Such as sewage, disposal, and sanitation services.

7. Financial Services

Direct insurance underwriting, reinsurance and insurance intermediation and other insurance auxiliary services, banking and other financial services, including securities-related services, provision of financial information, and asset management.

8. Health-Related Services and Social Services

Hospital services, other human health services, social services.

9. Tourism and Travel-Related Services:

Travel agencies and tour operators, hotels and restaurants, catering, tourist guide services.

10. Recreational, Cultural, and Sporting Services

Including entertainment services, news agency services, museums and other services; sporting services, and recreational services.

11. Transport Services

Maritime, internal waterways, air, space, and road transport services, pipeline transport, multi-modal transport, and services auxiliary to all modes of transport.

12. Other Services

This category covers any other services not specified elsewhere. It would certainly cover here energy, transport and distribution, and other energy-related services, which can also be covered under the residual categories of services of distribution, transport, environmental, and other business services.

5.6.5 Trade Related Intellectual Property Rights (TRIPS)**Q31. Write a short note on TRIPS.**

Ans :

(Imp.)

The General Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) was developed in the Uruguay round agreement for protecting the intellectual property rights. WTO defined intellectual property rights as "the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time". Even intellectual properties are included in the UR agreement on TRIPs which are as follows,

- (i) Copyright and related rights
- (ii) Trademarks covering service marks
- (iii) Geographical indications
- (iv) Industrial designs
- (v) Patents covering the protecting of new types of plants.
- (vi) Layout designs of integrated circuits
- (vii) Trade secrets and test data or any other unraveled information.

Q32. Explain various provisions of Trade Related Intellectual Property Rights (TRIPS).

Ans :

(Imp.)

1. Patents

A patent is an exclusive right granted by a country to the owner of an invention to make, use, manufacture and market the invention, provided the invention satisfies certain conditions stipulated in the law. Exclusive right implies that no one else can make, use, manufacture or market the invention without the consent of the patent holder. This right is available for a limited period of time.

The patent right is territorial in nature and inventors their assignees will have to file separate patent applications in countries of their interest, along with necessary fees, for obtaining patents in those countries. A new chemical process or a drug molecule or an electronic circuit or a new surgical instrument or a vaccine is a patentable subject matter provided all the stipulations of the law are satisfied.

2. Copyrights

Copyright is a right, which is available for creating an original literary or dramatic or musical or artistic work. Cinematographic films including sound-track and video films and recordings on discs, tapes, perforated roll or other devices are covered by copyrights. Computer programs and software are covered under literary works and are protected in India under copyrights.

The Copyright Act, 1957 as amended in 1983, 1984, 1992, 1994 and 1999 governs the copyright protection in India. For cinematographic films, records, photographs, posthumous publications, anonymous publication, works of government and international agencies the term is sixty years from the beginning of the calendar year following the year in which the work was published. For broadcasting, the term is twenty five years from the beginning of the calendar year following the year in which the broadcast was made.

3. Industrial Design

Many varieties and brands of the same product (e.g., car, television, personal computer, a piece of furniture, etc.) in the market can be seen, which look quite different from each other. If the products have similar functional features or have comparable price tags, the eye appeal or visual design of a product determines the choice. Even if the similarities are not close, a person may decide to go for a more expensive item because that item has a better look or colour scheme.

Design as per the Indian Act means the features of shape, configuration, pattern, ornament or composition of lines or colours applied to any article - whether in two dimensional or three dimensional or in both forms - by any industrial process or means, whether manual, mechanical or chemical, separate or combined, which in the finished article appeal to and are judged solely by the eye.

4. Trademarks

A trademark is a distinctive sign, which identifies certain goods or services as those produced or provided by a specific person or enterprise. Trademarks may be one or combination of words, letters, and numerals.

They may also consist of drawings, symbols, three dimensional signs such as shape and packaging of goods, or colours used as distinguishing feature. Collective marks are owned by an association whose members use them to identify themselves with a level of quality. A trademark provides to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorise others to use it in return for some consideration (payment). Well-known trademark in relation to any goods or services, means a mark which has become so to the substantial segment of the public which uses such goods or receives such services.

5. Geographical Indications

Indications which identify a good as originating in the territory of a member or a region or a locality in that territory, where a given quality reputation or other characteristics of the good is attributable to its geographical origin. The concept of identifying GI and protecting them is a new concept in India, perhaps in most developing countries, and has come to knowledge in these countries after they signed the TRIPS Agreement.

The term GI has been defined as "Geographical Indications", in relation to goods, means an indication which identifies such goods as agricultural goods, natural goods or manufactured goods as originating, or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristics of such goods is essentially attributable to its geographical origin and in case where such goods are manufactured goods one of the activities of either the production.

6. Integrated Circuit Layout Design (IC)

It provides protection for semiconductor IC layout designs. India has now in place Semiconductor Integrated Circuits Layout Design Act, 2000 to give protection to IC layout design. Layout design includes a layout of transistors and other circuitry elements and includes lead wires connecting such elements and expressed in any manner in a semiconductor IC.

Semiconductor IC is a product having transistors and other circuitry elements, which are inseparably formed on a semi-conductor material or an insulating material or inside the semiconductor material and designed to perform an electronic circuitry function. The term of the registration is ten years from the date of filing.

Q33. Explain the various requirements of Trade Related Intellectual Property Rights (TRIPS).

Ans :

TRIPS require member states to provide strong protection for intellectual property rights. For example, under TRIPS:

1. Copyright terms must extend to 50 years after the death of the author, although films and photographs are only required to have fixed 50 and to be at least 25 year terms, respectively.
2. Copyright must be granted automatically, and not based upon any "formality", such as registrations or systems of renewal.
3. Computer programs must be regarded as "literary works" under copyright law and receive the same terms of protection.
4. National exceptions to copyright (such as "fair use" in the United States) are constrained by the Borne three-step test.
5. Patents must be granted in all "fields of technology," although exceptions for certain public interests are allowed and must be enforceable for at least 20 years.
6. Exceptions to the exclusive rights must be limited, provided that a normal exploitation of the work and normal exploitation of the patent is not in conflict.
7. No unreasonable prejudice to the legitimate interests of the right holders of computer programs and patents is allowed.
8. Legitimate interests of third parties have to be taken into account by patent rights.
9. In each state, intellectual property laws may not offer any benefits to local citizens which are not available to citizens of other TRIPS signatories by the principles of national treatment (with certain limited exceptions). TRIPS also have a most favoured nation clause.

Many of the TRIPS provisions on copyright were imported from the Berne Convention for the Protection of Literary and Artistic Works and many

of its trademark and patent provisions were imported from the Paris Convention for the Protection of Industrial Property.

5.6.6 Trade Related Investment Measures (TRIMS)**Q34. Write a short note on Trade Related Investment Measures (TRIMS).**

Ans : **(Imp.)**

The Agreement on Trade Related Investment Measures (TRIMS) is one of Agreements covered under Annex IA to the Marrakech Agreement, signed at the end of the Uruguay Round (UR) negotiations. The Agreement addresses investment measures that are trade related and that also violate Article III (National treatment) or Article XI (general elimination of quantitative restrictions) of the General Agreement on Tariffs and Trade. International businesses are aware of the many restrictions on their investments in foreign countries. Trade Related Investment Measures (TRIMS) are those restrictions a nation places on foreign investment that adversely affect trade in goods and services. WTO measures on TRIMS have been entered into the agreement as a part of the Uruguay Round agreements.

This agreement does not set broad rules for investors in a WTO country. It simply prohibits laws or regulations that condition a firm's right to import foreign goods based on the volume of goods exported.

Q35. State the features of Trade Related Investment Measures (TRIMS).

Ans :

The main features of TRIMS are:

1. Coverage

TRIMS applies only to investment measures related to goods. It does not cover trade in services. Measures concerning service industries are addressed by the GATS, which does not contain explicit rules dealing with TRIMS. The TRIMS Agreement prohibits the application of certain investment measures related to trade in goods to enterprises operating within the territory of a Member.

2. Treatment to Entities

TRIMs agreement is concerned with the discriminatory treatment of imported and exported goods and is not specifically concerned with the treatment of foreign legal or natural persons.

3. Substantive Obligations

The TRIMs Agreement prohibits trade-related investment measures that are inconsistent with the basic propositions of GATT 1994. TRIMs forbidden by the agreement include those which are mandatory or enforceable under domestic law and those which are required in order to obtain an advantage, such as subsidies or tax breaks.

4. Transparency

Members commit to comply with GATT 1994, regarding Notification, Consultation, Dispute Settlement and Surveillance. Members must notify the Secretariat of the publications in which TRIMs may be found, including those applied by regional and local governments. Adequate opportunity for consultation should be granted by members to any request for information raised by any other member.

5. Establishment of Committee

TRIMs establishes Committee on Trade-Related Investment Measures responsible for the monitoring of operations and the implementation of the Agreement's commitments. The committee is open to all members and reports annually to the Council for Trade in Goods and it meets at least twice a year and at the request of any member.

Q36. State the various agreement on TRIMs.

Ans :

The Agreement on TRIMs provides that no contracting party shall apply any TRIMs which is inconsistent with the WTO Articles. An illustrative list identifies the following TRIMs as inconsistent:

1. Local content requirement (i.e., a certain proportion of local inputs be used in products),

2. Trade balancing requirement (i.e., imports shall not exceed a certain proportion of exports),

3. Trade and foreign exchange balancing requirements,

4. Domestic sales requirements (i.e., a company shall sell a certain proportion of its output locally).

The Agreement requires the notification of all WTO-inconsistent TRIMs and their phasing out within two, five and seven years by industrial, developing and least developed countries, respectively. Transition period can be extended for developing and least developed countries if they face difficulties in eliminating TRIMs. A number of TRIMs were employed in India prior to liberalization, and many of them have been phased out since then.

5.7 REGIONAL ECONOMIC INTEGRATION**Q37. Define Economic integration.**

(OR)

What is meant by Economic integration.

Ans :

After the second world war, many countries decided to assist their neighboring countries and get assistance from them in the form of economic cooperation such as commodity arrangements and regional economic integration. Regional economic integration is the preferential political and economic agreement among the member countries to cooperate with one another and to eliminate restrictions on the flow of goods, services, labour and capital between their regions.

The economic integration exists between the countries belonging to a particular geographic region but it can be between the countries at a long distance also. Trade between the countries is the lowest level of cooperation and it is the corner stone of any form of regional economic integration. Companies should be well aware of the regional trading groups to take advantage of them while doing trade in such countries. The strategies of multinational companies are mostly affected by the regional trading groups.

Countries form trading groups when their ideologies are similar due to similar awareness to the regional problems or due to their common history. Many trading groups contain countries who share same area of the world. Distant countries may join them because their goods need to travel between such countries.

Q38. States the various levels of economic integration.

Ans : (Imp.)

Levels

There are five levels of economic integration as shown in the figure. Each level is described briefly.

1. Free Trade Area (FTA)

It involves complete removal of tariffs on the traded goods among the member countries of Free Trade Area. They are free to impose tariff on the non-FTA countries. This aims at encouraging intra-region trade among the member countries of FTA. This agreement has an implementation period over which all the tariffs are eliminated on the products. They may also agree for the reduction of non-tariff barriers also. The examples of FTA are European Free Trade Area (EFTA), North American Free Trade Agreement (NAFTA) and the Asian Free Trade Area (AFTA).

2. Customs Union

This involves not only the removal of tariffs among the member countries but they also have a common barrier against the imports from nonmember countries. Thus, it differs from FTA in which a common external tariff does not exist. For example, the NAFTA between Canada, the United States, and Mexico does not have tariff barrier on trade among these three countries but they have separate tariff with other countries. This form of economic integration not only involves abolishment of tariff but also non-tariff barriers on intra-region trade.

3. Common Market

The common market is further one step ahead in economic integration. It involves common external tariff as well as a common

market also for free movement of factors of production such as labour, capital enterprise and technology among the member countries. Due to this free mobility of the factors, there will be best allocation of resources in a common market, which will lead to maximum utilization of resources among the member countries. Thus, a common market has no barriers to trade and has a common external trade policy and free movement of factors of production among the member countries.

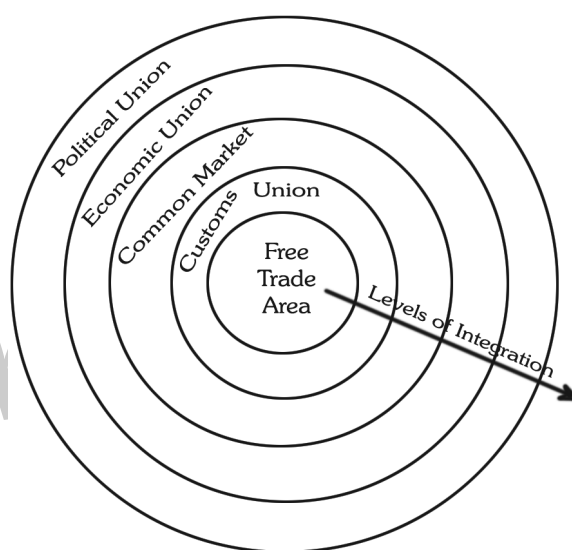


Fig.: Levels of Economic Integration

4. Economic Union

Besides eliminating internal trade barriers, adopting common external trade policies, and abolishing restrictions on the mobility of factors of production, economic union represents full integration of the economics and coordination of economic policies such as monetary policies, fiscal policies, taxation and social welfare programmes. For example, European Union has a common currency among member countries. It involves political integration also as the member countries lose a bit of their sovereignty.

It is very difficult to form a economic union as no nation wants to lose sovereign power of the state.

5. Political Union

It is the highest level of integration. It implies more formal political links between countries. In the pure political union, the member countries lose their national identities and come under a single state. While a limited form of political union exists when two or more countries share common decision making bodies and have common policies. The unification of East and West Germany is an example of total political union. The two nations now have one government and one set of overall economic policies. United States combined independent states into a political union.

The time span to move from one stage to another stage varies widely depending on the subservience of the economic goals among the member states. For example, it took almost four decades for Europe to enter into a complete economic union. But after one and half decades, the South Asian Association of Regional Cooperation (SAARC) could not complete the first stage.

Q39. Explain the benefits of Economic integration.

Ans :

- Economic integration is the preferential political and economic agreement among the member countries to cooperate with one another and to eliminate restriction on the flow of goods, services, labour and capital between their regions.
- Economic integration has a great influence on the international business. The economic integration takes place between any two countries irrespective of their locations. But usually, it exists between the countries belonging to similar region. Such an economic integration is referred to as "Regional Economic Integration".
- Even though economic integration is found to be beneficial, it has been avoided by some of the countries because of the two major reasons.

- Firstly, it may lead to the generation of unemployment related problems in a country and secondly, it increases the concern over the national sovereignty. The concerns over national sovereignty arises as the economic integration forces the member countries to withdraw control over certain key issues i.e., monetary policy, tax policy and trade policy.

5.7.1 European Union (EU)

Q40. What is European union (EU). State the objectives and Organizational Structure of European Union.

Ans :

(Imp.)

Introduction

Originally the European Coal and Steel Community (ECSC) was formed with the them West Germany, France, Italy, Belgium, Netherlands and Luxembourg in 1952. The aim of the ECSC was to eliminate import duties and quotas on Coal, Iron, Steel and Scrap regarding the international trade among the member countries.

The successful functioning of ECSC stimulated the member countries to extend this facility to all commodities by the treaty of Rome in 1957. This treaty gave birth to European economic community.

The EEC is also known as European common market. Originally six countries, viz., France, Federal Republic of Germany, Italy, Belgium, Netherlands and Luxembourg formed into the European economic community. By the treaty of Rome, 1957. It came into being on 1st January 1958.

The member of member countries of the EEC increased from Six to Nine on January, 1973 as UK, Ireland, and Denmark joined the community. Greece joined the EEC in 1981 and Portugal and Spain joined in 1984, Austria, Finland and Sweden joined the community on January 1, 1986. Now the EEC has 15 members. The requirement for joining the EEC as members are :

1. The country must be European country and
2. It must be a democratic country.

Objectives

1. To eliminate customs duties among states.
2. To eliminate obstacles for the free flow of import and for export of goods and services among member states.
3. To establish common customs duties and unified commercial policies.
4. To facilitate free movement of factors of production within block.
5. To provide regional funds for encouraging the economic development.
6. To make common laws to maintain competition throughout the community.
7. To make common measures for consumer protection.
8. To accept common agricultural policies, transport policies, technical standards, health and safety regulations and educational degree.
9. To allow greater monetary and fiscal coordination among member states and certain common monetary and fiscal policies.

Organizational Structure of EU

The organizational structure of EU originally consisted of the commission, the Parliament, Council of Ministers, Court of Justice, Advisory Committees and Court of Auditors.

European council is the main administrative body of the EEC. Each member country is represented by a ministry in this council. Each member country holds the presidency of the council for six-monthly period by rotation.

A committee of permanent representations acts as the secretariat of the council. This committee is also called 'corper'. The corper makes all important decisions. The corper is link between the EEC and member govt.

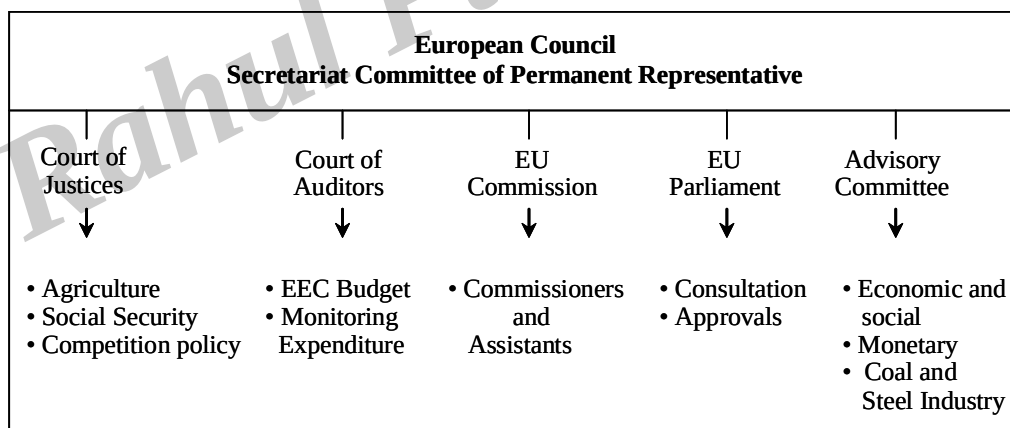


Fig.: Organization Structure of the EEC

European Council

European council act as the executive agent to the EEC in

- Making routine decisions
- Formulating rules of conduct
- Preparing new legislations
- Enabling members to carry out the provisions of the treaty.

(a) **Court of Justice:** There is court of Justice to Adjudicate disputes relating to Agriculture, Social security and competition policy.

(b) **Court of Auditors:** Court of auditors appointed as a part of the EEC by amending the treaty of Rome. The activities of the court of the auditors include :

- Auditing the EEC budget
- Monitoring the EEC expenditure
- Laying down improved procedure for collection of duties and levies.

(c) **European Commission:** This commission assists the council. There is executive body of EEC.

(d) **European Parliament:** The European commission should consult the parliament before a final decision is taken. The parliament acts through the parliamentary committee. The activities of European parliament include.

- Provide consultations and information to the commission.
- Approve or reject the draft budget prepared by the commission.
- Dismiss the commission, if necessary.

(e) **Advisory Committee:** There are several advisory committees to advise the European commission. These committee includes

1. Economic and social committee
 2. Monetary committee
 3. Consultative committee on Coal & Steel Industry.
- **Economic and Social Committee:** This committee represents the activities, like, employers, employee unions, farmers, retail traders, liberal professional and public. European commission appoints the members on this committee.

➤ **Monetary Committee:** This committee examines the monetary problems, problems of the balance of payments and suggests measure to overcome them.

➤ **Consultative committee on Coal and Steel Industry:** This committee studies the problems of Coal and Steel Industries and others suggestions.

Q41. Explain the functioning of European Union.

Ans :

1. Common Agricultural Policy (CAP)

In the common agricultural policy, each country has a 'Green Rate', based on which the support price is transformed into national price. There are no restrictions on the farmers with respect to the production quantity. The following are the features of this policy.

- (i) There are no restrictions on the transfer of agricultural products from one member country to other member countries.
- (ii) If the demand of a product exceeds its supply then imports are permitted.
- (iii) If the community supply exceeds the demand, then the subsidies are permitted to export or to promote additional consumption.
- (iv) EEC has gained self-sufficiency in agriculture.
- (v) The policy resulted in the excess production of some products such as milk lakes, wine lakes, butter and beef mountains.

2. Common Fisheries Policy

The common fisheries policy was accepted by the member countries of EEC in October 1970. This policy came into force from February 1971. The following are the characteristics of this policy,

- (i) This policy acts as a market for fresh frozen and preserved fish.

(ii) It provides common market standards and services for carrying out the trade among the members.

(iii) It provides equal access to the fishing areas to all nationals of EU countries.

This policy was not successful in the real world as it depended on the ad hoc settlements and allowances to the member countries.

3. European Monetary Union

European monetary union was initiated in March, 1979 and has the following characteristics,

(i) Exchange Rate Mechanism (ERM):
The member countries can control the inflation and interest rates with the help of exchange rate mechanism. The member countries tries to avoid major shifts in the value of their currencies.

(ii) European Currency Unit (ECU):
European currency unit is an alternative way for making the settlements between the central banks of the member countries. It includes all the currencies of the member countries. The official rate of the ECU is measured on daily basis.

(iii) European Monetary Cooperation Fund: European monetary cooperation fund is considered as a clearing house of the central banks of the member countries.

4. Factor Mobility

The most important objective of EU is to have free transfer of persons, services and capital among the member countries. All the restrictions imposed on the transfer of labour were eliminated by July 1968. But, the capital mobility is not achieved by EU as it is restricted by the international monetary disturbances.

5. Regional Development Policy

The main aim of regional development policy of the EU is to encourage balanced development of the member countries by

minimizing regional disparities and by promoting the backward regions. In order to achieve this objective EU provides financial support to the backward regions through,

(i) European investment bank

(ii) European social fund

(iii) European regional development fund.

6. Common Transport Policy

The main objective of common transport policy are,

(i) To eliminate the restrictions on transport for having a common market place.

(ii) To integrate the transport facilities of the whole community.

(iii) To manage and monitor the transport system within the community.

It is not possible for EEC to achieve these objectives because of the different issues relating to infrastructure pricing, entry controls for transporting the goods by rail and road.

5.7.2 Association of South East Asian Nations (ASEAN)

Q42. Explain briefly about Association of South East Asian Nations (ASEAN).

Ans : (Imp.)

In January 1992, a set of six countries namely Singapore, Brunei, Malaysia, Philippines, Thailand and Indonesia made and entered into an agreement to form a Common Effective Preferential Tariffs (CEPT) plan. CEPT was used in developing an Association of South East Asian Nations (ASEAN) which was a free trade area in 15 years which commenced from January 1993. The CEPT reduced the tariffs ranging from 0.50 percent to 20 percent starting with 15 products.

The beginning and the successful functioning of EEC and NAFTA gave birth to the formation of ASEAN. The member countries of ASEAN have been economically developing at a faster pace throughout the world. Skilled and well-educated personnel are the biggest strength of these member countries which allows them to attain rapid

industrialization. The ASEAN member countries are prosperous in mineral resources, agricultural goods and new industrial products. There are greater number of imports and exports which results in free flow of foreign capital among these countries.

The establishment of ASEAN has allowed the member countries to hold greater cohesiveness, exchange their economic and human resources and attain the synergy affect in the promotion of their agricultural sectors, industrial sectors and service sectors.

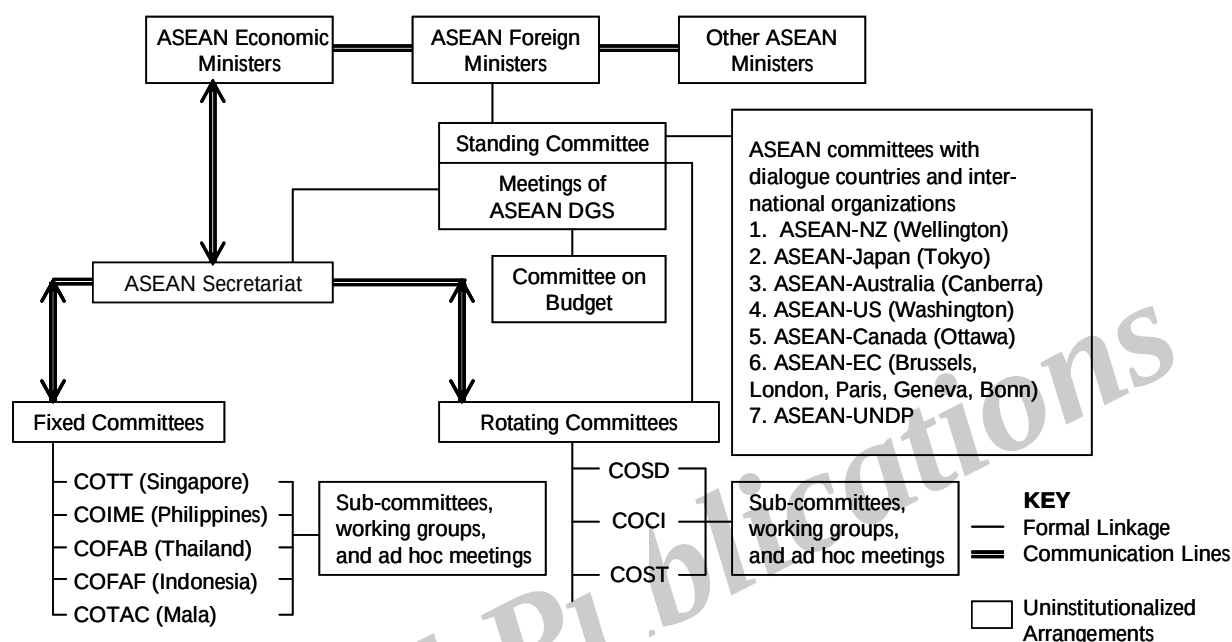


Fig.: Organization Structures of ASEAN

The chart depicts the subsidiary bodies of the ASEAN committees, the machinery of ASEAN economic cooperation and new organizational structure of ASEAN.

The general cultural and historical background allows the member countries to sustain their unity and solidarity by forming the trade blocks. The main goal/aim of ASEAN countries is to promote and make South East Asia a nuclear weapons free region and a peaceful zone with freedom and neutrality as its features.

ASEAN Free Trade Areas (AFTA)

The ASEAN countries very keenly observed the developments in the international environment such as the creation of NAFTA, SAARC and EURO. With respect to these developments, the ASEAN countries created the ASEAN Free Trade Area (AFTA) in September 1994. Initially, the AFTA was created for 10 years with the main objective of developing inter ASEAN trade.

Objectives

1. To increase the rate of foreign investment in the AFTA area.
2. To promote free trade area among the member countries.
3. To minimize the tariff of the products which are being manufactured in ASEAN countries. In ASEAN countries if 40% value is added to the product value, then it is considered as being manufactured in the ASEAN countries.

Q43. Explain recent issues in ASEAN.

Ans :

Special ASEAN-India Foreign Ministers' Meeting' was held recently in New Delhi, to commemorate the 30th anniversary of the ASEAN-India Dialogue Relations in 2022. The year 2022 has been designated as the 'ASEAN-India Friendship Year'. This year also marks the tenth anniversary of India's strategic cooperation with ASEAN. Trade between India and the ASEAN region surpassed \$78 billion in 2021. In the recent talks, the leaders batted for greater connectivity and integration with South Asia through the country.

The key issues discussed in the meeting were:

- Geopolitical headwinds from the Russia-Ukraine war:
- The Russia - Ukrain crisis has led to exacerbating concerns over food, fertiliser and fuel security, thus the ASEAN meeting highlighted the need for countries of the Indo-Pacific to enhance cooperation and to stand together, in this global scenario. The ways to mitigate the spilling effect of the crisis were discussed.
- It emphasised that ASEAN nations need to be able to maintain a "rules-based international order" that "recognises the diversity of Asia and makes the necessary adjustments to the post-WWII institutions".

The sharpening of superpower rivalry between the US and China and its direct implications on all of Asia were also discussed. It is also highlighted that the development of the ties on three mutuals- mutual respect, mutual sensitivity and mutuality of interests should be emphasised.

The two sides resolved to expand cooperation in key sectors such as trade, connectivity, defence, vaccine production and clean energy and agreed to review the ASEAN-India Trade in Goods Agreement (AITIGA) to ensure a more user-friendly, simple and trade facilitation.

Recognising the importance of the health sector, the meeting agreed to cooperate in vaccine production and distribution, research and

innovation in generic medicines, cooperation on traditional medicines, strengthening public health infrastructure and enhancing capacities for preparedness and response to pandemics and public health emergencies.

The meeting reaffirmed commitment to multilateralism founded on the principles of international law including the Charter of the United Nations, the 1982 UN Convention on the Law of the Sea (UNCLOS) and other relevant UN treaties and conventions.

Myanmar, one of ASEAN's ten member nations run by a military junta, was not invited to the summit because of disagreements over their lack of cooperation in implementing measures agreed upon by the 10-member group last year to help ease the country's violent political crisis. Ministerial Session of Delhi Dialogue XII, also took place along with the ASEAN meeting. Delhi Dialogue was jointly organised by the Research and Information System for Developing Countries (RIS) and the Economic and Research Institute for ASEAN and East Asia (ERIA).

In 2021: The first-ever India-ASEAN hackathon was held from 1st to 4th February 2021. This first-ever online hackathon was organized for students and mentors from 10 ASEAN Countries and India. Prime Minister Narendra Modi had announced the hackathon at the 16th India ASEAN summit in November 2019. It was an online hackathon jointly organized by the Indian Ministries of Education and Extern Affairs. The themes of the hackathon were 'Blue Economy' and 'Education.'

Q44. State the principles of ASEAN.

Ans :

1. Mutual respect for the independence, sovereignty, equality, territorial integrity, and national identity of all nations;
2. The right of every State to lead its national existence free from external interference, subversion or coercion;
3. Non-interference in the internal affairs of one another;
4. Settlement of differences or disputes by peaceful manner;

5. Renunciation of the threat or use of force; and
6. Effective cooperation among themselves.

5.7.3 North American Free Trade Agreement (NAFTA)

Q45. Explain briefly about North American Free Trade Agreement (NAFTA).

Ans : (Imp.)

Meaning

In January 1994, Canada, the United States and Mexico launched the North American Free Trade Agreement (NAFTA) and formed the world's largest free trade area. The Agreement has brought economic growth and rising standards of living for people in all three countries. In addition, NAFTA has established a strong foundation for future growth and has set a valuable example of the benefits of trade liberalisation. Canada and US had signed a Free Trade Agreement which came in effect on January 1, 1989, and later Mexico approached the United States to establish one. The result was that on January 1, 1994, North America Free Trade Agreement came into effect.

NAFTA

1. Market Access

Within 10 years of implementation all tariffs would be eliminated on North American Industrial products traded between Canada, Mexico and United States.

2. Non-Tariff Barrier

A host of non-tariff barriers and other trade distorting restrictions will be eliminated. Mexican barriers such as local intent, local production, and export performance requirement, etc., have to be eliminated.

3. Rules of Origin

NAFTA reduces tariffs only for goods made in North America. The Rule of Origin will determine whether goods qualify for preferential tariff treatment under NAFTA.

4. Custom Administration

Under NAFTA, all the signatories agreed to implement uniform customs procedures and regulations.

5. Investment

NAFTA eliminates investment conditions that restrict the trade of goods and services to Mexico.

6. Services

NAFTA establishes a comprehensive set of principles governing services trade. Signatories are allowed to open wholly owned subsidiaries, and all restrictions on the services will be lifted.

7. Intellectual Property

NAFTA provides protection to intellectual property rights. The agreement covers patents, trademark, copyright, trade secrets, semiconductors, integrated circuits, and copyright for North American movies, computer software, and records.

8. Government Procurement

NAFTA guarantees fair business and open competition for procurement in North America through a transparent and predictable procurement procedure.

9. Standards

NAFTA prohibits the use of standards and technical regulations used as obstacles to trade.

NAFTA proved to be a boon for all the three nations. Low end manufacturing moved south (Mexico) and sophisticated manufacturing services increased in the United States and Canada. Many companies simply started moving to Mexico. General Electric divisions even advised their suppliers that they better go to Mexico as it will cut the cost, or bear the risk of being dropped as a GE supplier. Auto manufacturing from all over world began moving to Mexico. Over 500,000 Mexicans make parts and assemble vehicles for all of the world's major auto producers.

The rule of origin, which requires 62.5% regional content, forced European and Asian automakers to establish their units in Mexico as it is more cost effective. Daimler Chrysler (DC) produces 45,000 cars and 200,000 trucks in Mexico of which, between 80% to 90% is exported to USA and Canada. The story for Daimler Chrysler's production in the United States is similar. That is, the US plant of DC exported only 5,300 vehicles in 1993 and the year after the signing of NAFTA it exported 17,500 and in 2000, it exported 60,000 vehicles. Total trade among these three countries more than doubled from \$306 billion to almost \$621 billion between 1993 and 2002. For Mexico alone, exports to the US and Canada grew by over 200% during this period.

With a strong, stable and transparent framework for investment, the region has attracted foreign investment at record levels, not just from NAFTA partners, but from around the world. At the same time, all three countries have experienced strong economic growth. The NAFTA commission reports indicate that after signing of NAFTA, more than \$189 billion was invested in the three countries in 1997. Meanwhile, total FDI into the NAFTA countries has reached \$864 billion. Job creation has surged in all the three countries. Since NAFTA was implemented, employment has grown by 10.1% (1.3 million) in Canada, by 22% (2.2 million jobs) in Mexico and by over 7% (12.8 million jobs) in the United States.

5.7.4 South Asian Association for Regional Co-operation (SAARC)

Q46. Discuss the concept of South Asian Association for Regional Co-operation (SAARC)

Ans : (Imp.)

Introduction

The South Asian Association for Regional Cooperation (SAARC) was established on December 8, 1985. It involves seven states of the Indian sub-continent - Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

The Secretariat of the Association is at Kathmandu, Nepal. Summits, which are the highest

authority in SAARC, are to be held annually. The country hosting the Summit holds the Chair of the Association. The Council of Ministers comprising Foreign Ministers of member nations, meet at least twice a year. Its functions include formulating policy, reviewing progress of regional cooperation, identifying new areas of cooperation and establishing additional mechanisms that may be necessary. The Governors of the Central Banks of Member States under the auspices of SAARC FINANCE meet regularly to consider cooperation in financial matters.

Beyond official linkages, SAARC also encourages and facilitates cooperation in private sector through the SAARC Chamber of Commerce and Industry (SCCI), which is a SAARC Apex Body. Other such bodies are SAARC LAW and the South Asian Federation of Accountants (SAFA). In addition, professional groups in South Asia have been given status of SAARC Recognized Bodies. These bodies include: Architects, Management Development Institutions, University Women, Town Planners, Cardiologists, Dermatologists, Teachers, Writers, Insurance Organizations, Diploma Engineers, Radiological and Surgical Care Societies.

The SAARC Secretariat is based in Kathmandu. It coordinates and monitors implementation of activities, prepares for and services meetings, and serves as a channel of communication between the Association and its member states as well as other regional organizations.

Areas of Cooperation

SAARC seeks cooperation in the following thrust areas:

1. Agriculture and Rural Development
2. Health and Population Activities
3. Women, Youth and Children
4. Environment and Forestry
5. Science and Technology and Meteorology
6. Human Resources Development
7. Transport
8. Information and Communications Technology

9. Biotechnology
10. Intellectual Property Rights
11. Tourism
12. Energy

Q47. Explain the objectives of SAARC.**Ans :**

The objectives of SAARC are:

- (i) To promote the welfare of the people of South Asia and to improve their quality of life.
- (ii) To accelerate economic growth, social progress and cultural development in the region and to provide all individuals the opportunity to live in dignity and to realize their full potential.
- (iii) To promote and strengthen selective self-reliance among the countries of South Asia.
- (iv) To contribute to mutual trust, understanding and appreciation of one another's problems.
- (v) To promote active collaboration and mutual assistance in the economic, social, cultural, technical and scientific fields.
- (vi) To strengthen co-operation with other developing countries.
- (vii) To strengthen co-operation among themselves in international forums on matters of common interest.
- (viii) To co-operate with international and regional organizations with similar aims and purposes.

5.7.5 Brazil, Russia, India and China (BRIC)**Q48. Explain briefly about BRICS.****(OR)****Discuss the concept of BRICS.****Ans :****(Imp.)**

Coordination between Brazil, Russia, India and China (BRIC) began informally in 2006, with a working meeting of the foreign ministers of the four countries on the sidelines of the United Nations General Assembly. Since then, the acronym,

created a few years earlier by the financial market, no longer confined itself to identifying four emerging economies. BRIC became a mechanism for cooperation in areas that have the potential to generate concrete results for Brazilians and the peoples of the other member countries.

Since 2009, the Heads of State and Government of the group meet annually. In 2011, at the Sanya Summit, South Africa became part of the grouping, adding the "S" to the acronym, now BRICS.

In the last 10 years, 10 Summit meetings have taken place, with the presence of all the leaders of the mechanism:

- **1st Summit:** Yekaterinburg, Russia, June 2009;
- **2nd Summit:** Brasília, Brazil, April 2010;
- **3rd Summit:** Sanya, China, April 2011;
- **4th Summit:** New Delhi, India, March 2012;
- **5th Summit:** Durban, South Africa, March 2013;
- **6th Summit:** Fortaleza, Brazil, July 2014;
- **7th Summit:** Ufa, Russia, July 2015;
- **8th Summit:** Benaullim (Goa), India, October 2016;
- **9th Summit:** Xiamen, China, September 2017;
- **10th Summit:** Johannesburg, South Africa, July 2018; and
- **11th Summit:** Brasília, Brazil, November 2019

Since the first summit in 2009, BRICS has significantly expanded its activities in several fields, but it was the financial field that guaranteed greater group visibility from the outset. As a result of the 2008 crisis, the four member countries started to work in concert with the G20, the IMF and the World Bank, with concrete proposals for reform of global financial governance structures, in line with the increase in the relative weight of emerging countries in the world economy. The role played by BRICS was instrumental in the reform of the IMF quotas approved in Seoul in 2010.

In the same field, BRICS cooperation led to the launching of the first two institutions of the mechanism: the New Development Bank (NDB) and the Reserve Contingent Arrangement (RCA). The creation of the bank was aimed at responding to the global problem of the scarcity of resources for the financing of infrastructure projects.

Starting in 2015, BRICS began to seek new areas of cooperation, always bearing in mind the need to obtain tangible benefits for the five countries. For Brazil, the areas of health, science, technology and innovation, digital economy and cooperation in the fight against transnational crime are priority in this effort to advance new areas of action.

The Eleventh Summit will be held in Brasília, on November 13 and 14, at Palácio Itamaraty, under the theme "BRICS: economic growth for an innovative future". Before the meeting of leaders, the Brazilian presidency will organize several meetings that will have as priorities:

- (i) Strengthening cooperation in science, technology and innovation;
- (ii) Strengthening cooperation in digital economy;
- (iii) Increased cooperation in combating transnational crime, in particular organized crime, money laundering and drug trafficking; and
- (iv) Encouraging the rapprochement between the New Development Bank and the Business Council.

Objectives

1. The BRICS countries act as one to promote a more legitimate international system, including advocating reform of the UN Security Council.
2. The BRICS group is a South-South framework for cooperation.
3. The BRICS group also acts as a bridge between developed and developing countries. For example, in the WTO, the BRICS countries are trying to promote a fair order regarding agricultural policies. They are attempting to promote the liberalization of the international economic order to diminish

agricultural subsidies in the United States and the European Union, which would make developing countries' agricultural products more competitive.

4. The BRICS group will also play an increasingly important role in assisting developing countries in gaining an advantage in trade and climate change negotiations, as well as on issues related to the export of manufacturing products.
5. Developing countries on the periphery of the group will be able to leverage the NDB and the CRA to increase their bargaining power.
6. The group established the BRICS Business Council, made up of 25 prominent entrepreneurs from the five countries and representing many industries and economic sectors.
7. The BRICS also formed an information-sharing and exchange platform that expands beyond economic cooperation to also involve educational, cultural, and environmental engagement.
8. They have a shared interest in challenging the current governance of Western financial institutions like the International Monetary Fund and the World Bank for that they have announced the establishment of the bank
9. They will advocate for the interests of middle powers on global forum.

5.7.6 India's Trade Policy

Q49. Define India's Trade Policy. State the features of India's Trade Policy.

Ans : (Imp.)

Meaning

The trade policy was used by most of the advanced countries like Germany, USA, Japan and others for two basic reasons,

1. Firstly, to ensure a quick development of home based industries by limiting their imports and providing cover up for their markets.

2. Secondly, ensuring home industries to gain market share in the foreign markets by encouraging their exports. The trade policy played a key role for developing advanced countries.

In India, the trade policy was not clearly defined. However, before independence in 1923, an import limit known as "Discriminating protection" was implemented with the sole intention of protecting the domestic industries against the foreign competition. In India, several changes took place after independence. One such change led to the formulation of trade policy, as a part of general economic policy of development.

Features

The main features of India's trade policy on the two sides i.e., import side and export side were as follows,

1. Import Side

The Indian industries were not in a position to compete against the advanced foreign industries, that were manufacturing and selling every product at relatively low costs. Therefore, if India had any chance of developing its industry it was only by guarding it against foreign competition. As a result the following two features were introduced.

(a) Import Restriction: The import restriction was incorporated as an essential element of the trade policy and was commonly referred to as "protection". This was necessary for the protection of domestic industries from unnecessary competition put forth by the foreign industries, thereby encouraging their industrial development. After independence the government had taken various initiatives for the prevention of imports on a large scale by the introduction of import licensing, import quotas, import duties and also the complete ban on import of certain goods.

(b) Mahalanobis Strategy of Economic Development: In the second plan,

India accepted the Mahalanobis strategy of economic development. This strategy dealt with the,

- (i) Prohibition or the establishment of minimum quantity for the import of non-essential consumer goods.
- (ii) Practising absolute control on the imports of various items.
- (iii) Encouragement of the economic growth of heavy-industries by importing machines, equipment and other development goods.
- (iv) Setting up a specific period for the policy of import substitution.

2. Export Side

India had to expand its exports in order to make the payments for its imports and to reduce its dependence on foreign countries. The entire domestic production was not fully consumable within the Indian market and therefore search for new potential markets became necessary. Formulation of fiscal policy and other benefits and setting up of trading institutions, were some of the primary steps taken by the Indian government to encourage its exports.

Secondly, after the second plan more attention was laid on vigorous exports encouragement in order to earn foreign exchange and overcome foreign exchange crisis. In the 1970s, the increased debt service responsibility and goal of becoming self-reliant again enforced the Indian government to emphasize on the promotion of exports.

Q50. Explain the various phases of trade policy.

Ans : (Imp.)

The India's trade policy consisted of five different phases. The first phase range from 1947-48 to 1951-52, the second phase began in 1952-53 and ends in 1956-57, the third phase's duration is after 1956-57 to June, 1966, after the devaluation of rupee in June 1966 the fourth phase began and the last phase began after 1975-76.

1. First Phase (1947- 48 to 1951- 52)

In the first phase, India was not able to liberalize its imports from restrictions because of the various restrictions imposed by the U.K with regard to the utilization of the sterling balances. The balance of payment with the dollar area was very much unfavorable. Therefore, a step was taken to import goods from strong currency countries and export to dollar area in order to bridge the existing gap in an economy. This is also called for devaluation of an Indian Rupee in 1949.

However, this phase continued with restrictive import policy and some restrictions were also implemented on export, because of the scarcity of resources in the domestic economy.

2. Second Phase (1952-53 to 1956-57)

During this phase many restrictions over the foreign trade were lifted up and liberalization of foreign trade was set as an ultimate objective of the trade policy. Procurement of import licenses were made in a more liberalized manner. Reduction in export duties, relaxing export controls, abolishment of export quotas and granting of incentives on export led to the encouragement of exports.

The imports had increased tremendously as a result of liberalization measures but there were no changes in the status of exports. This phase had been witnessed with a considerable deteriorations of the foreign exchange reserves leading to the need for the reversal of a Trade policy.

3. Third Phase (1956-57 to June, 1966)

In this phase, the trade policy was revised. It was designed as per the requirements of the planned economic development. Imports were restricted by the introduction of more restrictive import policy. Wherein, the import of certain goods was banned and was under the careful regulatory and control mechanisms. On the other hand, the exports were liberalized and vigorously promoted. Promotion and diversifications of export were

found to be the most suitable solution for the prevailing problems of balance of payments. Export was encouraged for both traditional and modern items. To reduce the dependence on foreign countries, the import substitution industries were also established. In 1962, the Mudaliar committee had thoroughly reviewed the trade policy.

4. Fourth Phase (June, 1966 to 1975-76)

The devaluation of Indian Rupee in June, 1966 witnessed the beginning of the fourth phase. During this phase, the trade policy had taken several measures through which not only exports, but also imports were liberalized. The suggestions made by the Mudaliar committee (1962) led to the rapid increase in exports. Tax exemptions on the earnings of exports, removal of disincentives, export promotion through import entitlement, increased allocation of resources towards the development of export-oriented industries and establishment of export promotion advisory council, ministry of International trade and so on, were some of the major recommendations made by the committee. (The devaluation of the Indian rupee was an important step taken by the government of India to revise imports and to increase exports, as all other measures, had proved to be ineffective in eliminating adverse balance of payments).

The devaluation proved to be wrong and the adverse balance of payments further worsened the economic condition of the country. However, the fourth phase of trade policy was found to be effective and successful in regulating and controlling both the exports and imports of the country.

5. Fifth Phase (1975-76 Onwards)

The government of India had liberalized the imports so as to encourage exports during the fifth and last phase of the trade policy. For increasing the domestic supply of essential goods and to control the increase in the price level, the import was liberalized in 1977-79 under the government of Janata party. The following were the goals and objectives of import-export policy of India,

- (a) To increase the exports further.
- (b) To facilitate the growth of the local and regional industries.
- (c) To optimally exploit agricultural and human resources of the country.
- (d) To support technological advancement by focussing on encouragement of export and preservation of energy.
- (e) To boost those industries that were engaged in exports specially those which are associated with the manufacturing units.
- (f) To indulge all the possible savings of the country for imports.

Therefore, this trade policy had been focussed for the economic growth and the exports promotion by liberalizing and regulating control over the imports.

In 1985, the Abid Hussain committee helped the government in the formulation of an effective import-export policy. The committee suggested that the government had liberalized import for increasing exports. Therefore, there was a great misrepresentation for implementing the suggestions made by the committees.

The government under the leadership of Rajiv Gandhi, had made several attempts for liberalizing the exports and imports. From 1985-1990, there was a recorded annual growth of 17% in dollars. However, this growth was declined to 9% in 1990-91.

Q51. Analyze the sector wise trade policies in India.

Ans :

In India various trade policies were introduced by the government which helps in facilitating the trading mechanism of the country. However, these trade policies were set up for the different sectors based on their features.

1. Agricultural Sector

Indian economy is basically Agro based economy. Agricultural sector contributes about 60% of the growth of an Indian

economy. There has been no progress through the adoption of the trade reform programmes in India but certain measures related to agricultural products were made during the export import policy of 2002-07.

The progress of the agricultural sector is being witnessed by,

- (i) Removing regulatory mechanisms on the movement of certain food grains between the states.
- (ii) In exam policy of 2002-07, restrictions on all agricultural products excluding some products like Jute and Onions were removed.
- (iii) The Indian government has identified those commodities that have major impact on the economic development of various states and established Agriculture Export Zones (AEZ) to enhance the exports in this sector by reducing the tariff rates and subsidies.
- (iv) Administered the prices of exports and imports of certain products.
- (v) The transport subsidy was provided for the export of fruits, vegetables, poultry and dairy products for developing the agricultural sector.

2. Food Processing Sector

The trade policies in this sector along with their recent developments include,

- (i) Establishes the tariff reforms since 1993, in the food processing sector which reduces the tariff percentages in to a great extent. Now as per recent records the processed food have a tariff rate of 15-25%.
- (ii) Removal of the restrictions while seeking the import licenses.
- (iii) There has been an increase in foreign investment because of the increased participation of foreigners and Non-Resident Indians (NRI) which ranges between 51%- 100%.

3. Mining and Petroleum Sector

Indian economy is mostly effected by the petroleum imports. Earlier the government of India has administered the prices of petroleum but now government is taking actions for the exploration of domestic oil reservoirs so as to reduce the nation's dependability on its imports.

- (i) Government is offering tax holidays as investment incentives to the companies to encourage the exploration of the domestic oil resources.
- (ii) Since 1991 industrial policy underwent major changes. One such change involves to seek permission for participation of foreign investment in mining activity of about 13 minerals.
- (iii) Foreign Investment Promotion Board (FIPB) must approve that foreign investment wherein the participation of foreign equity is more than 50%.
- (iv) Because of the trade reforms the tariff rates for non-ferrous and iron ores were reduced from 46% in 1993-94 to 36% and for coal, a decline was witnessed from 65% (1993-1994) to 13%.

4. Manufacturing Sector

The trade reforms in manufacturing sector include,

- (i) Reductions in the tariff rates
- (ii) Delicensing the import restrictions
- (iii) Reduced the provisions for seeking the compulsory industrial licensing.
- (iv) Liberal foreign investment policies by including number of industries and other sectors such as automobile sector.

5. Service Sector

More than half of the India's national income is the resultant of the service sector. Rapid growth in the finance, information technology, commercial tourism and other service sector related areas brought the domestic growth of the service sector of all the areas, global outsourcing constitutes an important driver for achieving the growth of the service sector.

Short Question & Answers

1. Foreign Portfolio Investment (FPI)?

Ans :

Foreign portfolio investment (FPI) consists of securities and other financial assets held by investors in another country. It does not provide the investor with direct ownership of a company's assets and is relatively liquid depending on the volatility of the market. Along with foreign direct investment (FDI), FPI is one of the common ways to invest in an overseas economy. FDI and FPI are both important sources of funding for most economies.

2. Characteristics of Foreign Portfolio Investment

Ans :

- (i) The primary intention is not to control a foreign business enterprise but to gain from profit making opportunities available in foreign markets.
- (ii) FPI is represented by monetary flows from individuals, mutual funds, portfolio management companies, pension funds, equity funds etc.
- (iii) Due to the short term nature of such investments the fund flows are less predictable.
This may result in volatility in both the foreign exchange and capital markets.
- (iv) There is no interface between the management and the foreign investor. The transactions represent a change in ownership of existing equity from one investor to another. It has no impact on the balance sheet of the company.

3. What is FEMA?

Ans :

In 1999, Foreign Exchange Management Act (FEMA) was brought to replace Foreign Exchange Regulation Act (FERA), 1973. The purpose of FERA was to regulate the conducting of the business of

Indian companies in foreign markets and foreign companies in the Indian market. FEMA was brought into effect from January 1, 2000. This act applies to every office, branch or agency in India and also to the foreign offices and branches of people who are the Indian residents.

FEMA was framed by the Indian Government and is directly associated with the foreign direct investment in the economy. FEMA has a crucial role to play in facilitating external payment and trade.

4. WTO

Ans :

The formation of WTO on 1st January, 1995 was regarded as the greatest reform of international trade, since 1948. Initially, international commerce was under the guidance of GATT which assisted in developing a productive multilateral trading system. However, it needed examination by the end of 1980's.

The Uruguay round was conducted for performing the examination. This negotiation was one of the largest trade negotiations. Initially, some people felt that Uruguay round would fail but, at the end it was successful. WTO includes many things along with GATT. GATT was considered as a small and provisional institution which was not recognized as an international organization. GATT is now replaced with WTO. The agreement of GATT was modified and transformed into the new WTO agreements. GATT deals only with trade in goods, whereas WTO agreements involves service and intellectual property.

5. GATT

Ans :

The General Agreement on Trade and Tariffs was formed in 1947. The main objective behind the formation of GATT was to liberalize the trade globally. The Bretton Woods Conference of 1944, suggested the formation of International Monetary Fund (IMF), World Bank and International Trade Organization (ITO). Even though, the IMF and

World Bank was formed in 1946, the ITO charter was not approved due to the arguments that its enforcement provisions will intervene with the power of domestic policy making. So, till the ITO charter was approved, the GATT which was established as a provisional agreement in 1947 for reducing the gap between the countries, became the underlying structure for international trading system.

GATT was modified into a World Trade Organization (WTO) which came into effect from 1st January, 1995. WTO is more stronger and powerful than GATT and performs several functions.

6. Objectives of WTO

Ans :

- (i) To implement the new world trade system as visualized in the Agreement.
- (ii) To promote World Trade in a manner that benefits every country.
- (iii) To ensure that developing countries secure a better balance in the sharing of the advantages resulting from the expansion of international trade corresponding to their developmental needs.
- (iv) To demolish all hurdles to an open world trading system and usher in international economic renaissance because the world trade is an effective instrument to foster economic growth.
- (v) To enhance competitiveness among all trading partners so as to benefit consumers and help in global integration.
- (vi) To increase the level of production and productivity with a view to ensuring level of employment in the world.

7. General Agreement on Trade in Services

Ans :

The General Agreement on Trade in Services (GATS), negotiated during the Uruguay round, is the first step of multilaterally Agreed and legally enforceable rules and disciplines ever negotiated to cover international trade in services. The agreement

contains three elements: A Framework of general rules and disciplines, Annexes addressing special conditions relating to individual sectors (the sectors covered are movement of natural persons, cross-border trade, consumption abroad, and commercial presence) and National schedules of market access commitments. A council for trade in services oversees the operation of the agreement.

8. TRIPS.

Ans :

The General Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) was developed in the Uruguay round agreement for protecting the intellectual property rights. WTO defined intellectual property rights as "the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time". Even intellectual properties are included in the UR agreement on TRIPs which are as follows,

- (i) Copyright and related rights
- (ii) Trademarks covering service marks
- (iii) Geographical indications
- (iv) Industrial designs
- (v) Patents covering the protecting of new types of plants.
- (vi) Layout designs of integrated circuits
- (vii) Trade secrets and test data or any other unraveled information.

9. Write a short note on Trade Related Investment Measures (TRIMS).

Ans :

The Agreement on Trade Related Investment Measures (TRIMs) is one of Agreements covered under Annex IA to the Marrakech Agreement, signed at the end of the Uruguay Round (UR) negotiations. The Agreement addresses investment measures that are trade related and that also violate Article III (National treatment) or Article XI (general elimination of quantitative restrictions) of the General Agreement on Tariffs and Trade. International businesses are aware of the many restrictions on their investments in foreign countries.

Trade Related Investment Measures (TRIMS) are those restrictions a nation places on foreign investment that adversely affect trade in goods and services. WTO measures on TRIMs have been entered into the agreement as a part of the Uruguay Round agreements.

This agreement does not set broad rules for investors in a WTO country. It simply prohibits laws or regulations that condition a firm's right to import foreign goods based on the volume of goods exported.

10. Economic integration

Ans :

After the second world war, many countries decided to assist their neighboring countries and get assistance from them in the form of economic cooperation such as commodity arrangements and regional economic integration. Regional economic integration is the preferential political and economic agreement among the member countries to cooperate with one another and to eliminate restrictions on the flow of goods, services, labour and capital between their regions.

The economic integration exists between the countries belonging to a particular geographic region but it can be between the countries at a long distance also. Trade between the countries is the lowest level of cooperation and it is the corner stone of any form of regional economic integration. Companies should be well aware of the regional trading groups to take advantage of them while doing trade in such countries. The strategies of multinational companies are mostly affected by the regional trading groups.

Choose the Correct Answer

1. When did the World Trade Organization come into effect? [d]
(a) March 6, 1996 (b) April 8, 1994
(c) February 5, 1994 (d) January 1, 1995
2. How many members are present in the WTO? [d]
(a) 207 (b) 195
(c) 160 (d) 164
3. Where is the headquarters of the WTO located? [b]
(a) Austria (b) Geneva
(c) New York (d) Washington DC
4. Which of these institutions is not a part of the World Bank community? [c]
(a) IFC (b) IDA
(c) WTO (d) IBRD
5. Along with the World Bank and _____, WTO is the third economic pillar of worldwide dimensions. [b]
(a) International Economic Association (IEA) (b) International Monetary Funds (IMF)
(c) International Development Bank (IDB) (d) International Funding Organisation (IFO)
6. Which of the following statements is false? [a]
(a) India's vote share in the International Monetary Fund is 10%.
(b) Both the IMF and the IBRD have headquarters in Washington.
(c) The IBRD is also known as the World Bank.
(d) Both the IMF and the World Bank are known as the Bretton Woods twins.
7. Among the following options, which one is not the objective of the WTO? [b]
(a) To protect environment
(b) To improve the balance of payment situation of the member countries
(c) To improve the standard of living of people of the member countries
(d) To enlarge production and trade of goods
8. Who is the current Director-General of WTO? [d]
(a) Pascal Lamy (b) Mahmoud Riad
(c) Chedli Klibi (d) Roberto Azevêdo
9. TRIPS (Trade-Related Aspects of Intellectual Property Rights) agreement is administered by the _____. [c]
(a) World Bank (WB)
(b) United Nations Organization (UNO)
(c) World Trade Organization (WTO)
(d) United Nations Conference on Trade and Development (UNCTAD)
10. Who is most recently appointed as the Ambassador and Permanent Representative of India to WTO? [d]
(a) JS Deepak (b) TS Deepak
(c) Anwar Hussain Shaik (d) Brajendra Navnit

Fill in the blanks

1. _____ is an institution like a mutual fund, insurance company, pension fund etc.
2. _____ was framed by the Indian Government and is directly associated with the foreign direct investment in the economy.
3. The formation of WTO on _____.
4. GATT stands for _____.
5. The _____ agreements are elaborated and difficult in nature as they are legal and includes great variety of activities.
6. TRIPS stands for _____.
7. A _____ is a distinctive sign, which identifies certain goods or services as those produced or provided by a specific person or enterprise.
8. TRIMS stands for _____.
9. There are _____ levels of economic integration.
10. _____ is simplest and widely used mode to enter into foreign markets.

ANSWERS

1. FII
2. FEMA
3. 1st January, 1995
4. General Agreement on Trade and Tariffs
5. WTO
6. Trade Related Intellectual Property Rights
7. Trademark
8. Trade Related Investment Measures
9. Five
10. Export

FACULTY OF COMMERCE
M.Com. I - Semester (CBCS) Examination
Model Paper - I
MANAGERIAL ECONOMICS & BUSINESS ENVIRONMENT

Time : 3 Hours]

[Max. Marks : 70

PART - A (5 × 4 = 20 Marks)

Note: Answer all the questions.

ANSWER

- | | |
|---|-------------------|
| 1. Limitations of managerial economics. | (Unit-I, SQA.2) |
| 2. Production function. | (Unit-II, SQA.2) |
| 3. Perfect Competition. | (Unit-III, SQA.3) |
| 4. Business Environment. | (Unit-IV, SQA.1) |
| 5. Foreign Portfolio Investment (FPI)? | (Unit-V, SQA.1) |

PART - B (5 × 10 = 50 Marks)

Note: Answer all the questions.

- | | |
|--|-------------------|
| 6. (a) (i) Explain the Nature and Scope of Managerial Economics. | (Unit-I, Q.No.2) |
| (ii) Describe the applications of Elasticity of Demand in Decision Making. | (Unit-I, Q.No.41) |
| OR | |
| (b) (i) Define demand. What are the objectives of demand? | (Unit-I, Q.No.17) |
| (ii) Mr. X turned down a job offer of Rs. 5,00,000 per annum and started his own business. He invested Rs. 50,00,000 of his own money in the business by withdrawing the money from fixed deposit which was earning an interest of 7% per annum. He is using his own building for the business on which he was getting a rent of Rs. 15,000 per month. | |
| The total revenue from the business during the first year was Rs. 85,69,000. The expenses were Rs. 60,62,000. Did Mr. X take correct decision by starting the business? | (Unit-I, Prob.4) |
| 7. (a) (i) Explain the Law of Diminishing marginal returns with suitable examples and graphs. | (Unit-II, Q.No.8) |
| (ii) Give the following MP_L function, a fixed capital stock of 64 units, wage rate of Rs. 10 and an output price of Rs. 5, determine the optimal combination of inputs $MP_L = 100 (K^{0.5}/L^{0.5})$. | (Unit-II, Prob.2) |

OR

- (b) (i) Explain briefly about Optimal employment of two inputs. (Unit-II, Q.No.14)
- (ii) The short run cost functions of a firm is
 $TC = 120 + 6Q + 2Q^2$
Where TC = Total cost, Q = Quantity of output
Find the rate of output that results in minimum average variable cost. (Unit-II, Prob.6)
8. (a) (i) How the Price-Output Determination under Perfect Competition both in the long and short run. (Unit-III, Q.No.6)
- (ii) Discuss how monopoly is acquired in the mumbai city taxi industry area. (Unit-III, Q.No.11)
- OR
- (b) (i) What is Price Discrimination? Discuss different ways of Price Discrimination. (Unit-III, Q.No.18)
- (ii) What are the advantages and disadvantages of Perfect Competition? (Unit-III, Q.No.8)
9. (a) State the components of business environment. (Unit-IV, Q.No.4)
- OR
- (b) Explain the impact of Liberalization in India. (Unit-IV, Q.No.11)
10. (a) Discuss the problems and consequences of foreign direct investment with reference with India. (Unit-V, Q.No.8)
- OR
- (b) Explain briefly about agreement on agriculture (AOA). (Unit-V, Q.No.27)

FACULTY OF COMMERCE
M.Com. I - Semester (CBCS) Examination
Model Paper - II
MANAGERIAL ECONOMICS & BUSINESS ENVIRONMENT

Time : 3 Hours]

[Max. Marks : 70

PART - A (5 × 4 = 20 Marks)**Note: Answer all the questions.**

1. Explain the differences between Accounting profit and Economic profit.
2. Economies of Scope.
3. What is Monopoly?
4. Define Economic planning.
5. What is FEMA?

ANSWER

(Unit-I, SQA.4)

(Unit-II, SQA.6)

(Unit-III, SQA.5)

(Unit-IV, SQA.3)

(Unit-V, SQA.3)

PART - B (5 × 10 = 50 Marks)**Note: Answer all the questions.**

6. (a) (i) Fill in the blanks in the following Table

Units of labour	Total product	Average product	Marginal product
1	-	40	-
2	-	-	48
3	138	-	-
4	-	44	-
5	-	-	24
6	210	-	-
7	-	29	-
8	-	-	27

(Unit-I, Q.No.Prob.1)

- (ii) Explain the Nature and Scope of Managerial Economics.

(Unit-I, Q.No.2)

OR

- (b) (i) Explain the nature of business decision making problem. How is an optimal business decision made.

(Unit-I, Q.No.5)

- (ii) Explain the differences between Accounting profit and Economic profit.

(Unit-I, Q.No.14)

7. (a) (i) Define isoquant. Explain how isoquants are used to represent a production function with two variable inputs. (Unit-II, Q.No.11)
- (ii) The following production function is given:
 $Q = 40 K^{0.5} L^{0.5}$.
 Find marginal product at labour and capital find out whether the firm is recurring increasing or decreasing or constant returns to scales. (Unit-II, Prob.3)
- OR
- (b) (i) Explain Cost-Output Relationship in the Short-Run. (Unit-II, Q.No. 21)
- (ii) Following is the short run total cost function
 $TC = 100 + 50Q - 12Q^2 + Q^3$
 Determine total variable cost function average variable cost function and marginal cost function. Calculate total cost, ATC, AVC and MC when firm produced 10 units of output. (Unit-II, Prob.4)
8. (a) (i) How is price output determined under monopolistic competition ? (Unit-III, Q.No. 22)
- (ii) Explain the differences between perfect competition and monopolistic competition. (Unit-III, Q.No.29)
- OR
- (b) (i) How is price determined under mono poly in long-run ? (Unit-III, Q.No.13)
- (ii) Distinguish between Oligopoly Vs Monopolistic Competition. (Unit-III, Q.No.30)
9. (a) Define Economic planning. What are the objectives of economic planning. (Unit-IV, Q.No.5)
- OR
- (b) Define Economic Reforms. Explain the nature of Economic Reforms. (Unit-IV, Q.No.14)
10. (a) (i) Explain the organization structure of WTO. (Unit-V, Q.No.23)
- (ii) What is European union (EU). State the objectives and Organizational Structure of European Union. (Unit-V, Q.No.40)
- OR
- (b) (i) Explain various provisions of Trade Related Intellectual Property Rights (TRIPS). (Unit-V, Q.No.32)
- (ii) Write a short note on Trade Related Investment Measures (TRIMS). (Unit-V, Q.No.34)

FACULTY OF COMMERCE
M.Com. I - Semester (CBCS) Examination
Model Paper - III

MANAGERIAL ECONOMICS & BUSINESS ENVIRONMENT

Time : 3 Hours]

[Max. Marks : 70

PART - A (5 × 4 = 20 Marks)

Note: Answer all the questions.

ANSWER

- | | |
|---------------------------------|--------------------|
| 1. Income Elasticity of Demand. | (Unit-I, SQA.9) |
| 2. Incremental cost. | (Unit-II, SQA.10) |
| 3. Define Oligopoly. | (Unit-III, SQA.10) |
| 4. Privatization. | (Unit-IV, SQA.9) |
| 5. GATT | (Unit-V, SQA.5) |

PART - B (5 × 10 = 50 Marks)

Note: Answer all the questions.

- | | |
|---|--------------------|
| 6. (a) (i) Discuss the factors determining demand for a commodity. | (Unit-I, Q.No.24) |
| (ii) What is firm? Explain the objectives and theories of firm. | (Unit-I, Q.No.7) |
| OR | |
| (b) (i) State different types of elasticity of demand. | (Unit-I, Q.No.30) |
| (ii) Take the following demand function and work out price elasticity of demand, where price goes up from Rs.3 to Rs. 4. $Q = 200 - 15P$, where Q stands for Quantity demanded and P stands for Price. | (Unit-I, Prob.7) |
| 7. (a) (i) Explain in detail the long run cost functions with diagram. | (Unit-II, Q.No.24) |
| (ii) Given the following TR and TC function | |
| TR = 50 Q | |
| TC = 10000 + 30 Q | |
| Determine the break-even rate of output. Determine the output rate necessary to earn profit of Rs. 20,000. | (Unit-II, Prob.5) |
| OR | |
| (b) (i) What do you understand by Cobb Douglas production function ? | (Unit-II, Q.No.4) |
| (ii) Consider production function $Q = 5L^{0.5} K^{0.3}$. Does it represent increasing, decreasing or constant return to scale. | (Unit-II, Prob.1) |

8. (a) (i) Explain the concept of Shut down decision. (Unit-III, Q.No.9)
(ii) Explain various Allocative Inefficiency involved in monopoly market. (Unit-III, Q.No.14)

OR

- (b) (i) What are the various degrees of price discrimination? (Unit-III, Q.No.19)
(ii) How price is determined under collusive oligopoly ? (Unit-III, Q.No. 27)
9. (a) What are the objectives of NITI Aayog? (Unit-IV, Q.No.8)

OR

- (b) Explain the various forms of privatization. (Unit-IV, Q.No.23)
10. (a) State the benefits of FDI to Home and Host Countries. (Unit-V, Q.No.5)
- OR
- (b) Explain the objectives and functions of WTO. (Unit-V, Q.No.24)