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Unit 1- Management Concept

Difference between organization, management and administration:-

Organization, management and administration –these three concepts are different from each other. Possible differences are given below:

Organization	Administration	Management
1.Organization's business is to connect works and staff of an institution	1. Administration's work is to set/decide the aim and ethics/law of an institution	1. Management's aim is to manage the work done by others according to specific ethics.
2. It is a component of management.	2. Composition and organization of planning is done by administration.	2. It's working periphery is comprehensive. Along with planning and organization it also includes: adding of command, direction.
3. The work of management is doneby administration. It is the — – management	3. Administration is the creator of organization. The work of management is done by this organization.	3. Management done its job by organization.
4. Organization works as a neuron of a human body.	4. Administration erects an institution like body creator.	4. Management works as a whole body.
5. As to the planning, It is the foundation of the workplace	5. It get the responsibility – Legislation of planning	5. It supervises the works execution of staffs according to planning.
6. Organization is the field of working together staff-groups of every grade of an institution	6. Administration is center of fulfilling the works of higher-level staffs.	6. Management is the applying field of given works to higher and lower level staffs.

7. It's work is organizational	7. It's work is to apply rules, regulation and law.	7. It's work is to convert rules and regulations to work.
8. Organizations work expressed through work and applying.	8. Administration's work expressed through mind and thoughts.	8. Managemental work also expressed through work and apply.
9. Organization is effective machinery for accomplishing company objectives in a team spirit.	9. Administration gives proper direction, it is a directing function.	9.Management properly executes,it is a execution function.
10. Organization has been termed the keystone on which the entire structure of any enterprise is based.	10. for effective functioning of administration proper structuring of the enterprise is must.	10. for effective functioning of maagement proper strun cturing of the enterprise is must.

Importance of Management:-

Management is "The art of getting things done by a group of people with the effective utilisation of available resources".

Peter F. Drucker defines management as, "Management is an organ; organs can be described and defined only through their functions."
According to Henry Fayol, "To manage is to forecast and plan, to organise, to compound, to coordinate and to control."

According to F.W. Taylor, "Management is the art of knowing what you want to do and then seeing that it is done in the best and cheapest way."

According to Koontz and O'Donnel, "Management is the creation and maintenance of an internal environment in an enterprise where individuals, working in groups, can perform efficiently and effectively towards the attainment of group goals. It is the art of getting the work done through and with people in formally organised groups."

With the development of an organisation the complexities also increase and there comes the need of an effective management system. This is the requirement of every organisation, not necessarily a business organisation but also for banks, schools, hospitals and many more.

The concept of management was developed from the days of Adam. Management is required where a group of people are working to achieve any objective.
Henry Fayol gave the management theory in (1916) which was based on his experiences in a mining company. This management theory was compiled in a book named "The General and Industrial Management".
He classified the elements of management into five categories as mentioned below:

- Planning
- Organising
- Commanding
- Co-ordination
- Control

Other important contribution was made by **Frederick Winslow Taylor (**19th century) who was the father of

Scientific Management. He gave the following principles of Scientific Management:

Science is not a rule of thumb: Where the worker is allotted fair work, standardize and proper system of payment which discarded the old method of working.

- **Harmony in group action:** There should be peace and friendship in the group action and any kind of dissatisfaction should be eliminated.
- **Co-operation:** There should be cooperation between management and workers; this is achieved by mutual understanding and change in thinking.
- **Maximum output:** It is achieved through division of work and responsibility by the management and workers together.
- **Improvement of workers:** Workers should be well examined on the physical, educational and psychological parameters and should be provided with the training for their growth.
- Some of the other major works in the management field were done by Peter F. Drucker, Max Weber, George Elton Mayo, Mary Parker Follett, Henry L. Gantt etc.

The following are the characteristics of management:

- management is an art as well as a science
- it is an activity of effective utilisation of available resources
- it is a continuous process
- each activity in management is directed towards the achievement of pre-determined objectives
- it is a group of organised activities
- it is a factor of production
- it is a system of activity
- it is a discipline
- it is a purposeful activity
- it is a distinct entity
- it aims at maximising profit

- it helps in effective decision making
- it is a profession
- the principles and practices of management have universal applications
- it is dynamic in nature
- it is needed at all levels
- it is the function of executive leadership

Unit 2:-Management

Introduction of the Management: - Management is understood in different ways by different people. Economists regard it as a factor of production. Sociologists see it as a class or group of persons while practitioners of management treat it as a process.

For our understanding, management may be viewed as what a manager does in a formal organization to achieve the objectives. In the words of Mary Parker Follet management is "the art of getting things done through people". This definition throws light on the fact that managers achieve organizational goals by enabling others to perform rather than performing the tasks themselves. Peter F. Drucker defines, "Management is an organ; organs can be described and defined only through their functions". According to Terry, "Management is not people; it is an activity like walking, reading, swimming or running. Management aims at achieving the organisation‟s goals by effective use of resources in the best interests of the society.

The salient features which highlight the nature of management are as follows: Management is goal-oriented: Management is not an end in itself.

It is a means to achieve certain goals. Management has no justification to exist without goals. Management goals are called group goals or organisational goals. The basic goal of management is to ensure efficiency and economy in the utilisation of human, physical and financial resources. The success of management is measured by the extent to which the established goals one achieved. Thus, management is purposefull.

Management is universal: Management is an essential element of every organised activity irrespective of the size or type of activity. persons are engaged in working for a common goal, management is necessary. All types of organisations, e.g., family, club, university, government, army, cricket team or business, require management. Thus, management is a pervasive activity. The fundamental principles of management are applicable in all areas of organised effort. Managers at all levels perform the same basic functions.

Management is an Integrative Force: The essence of management lies in the coordination of individual efforts in to a team. Management reconciles the individual goals with organisational goals.

Management is a Social Process: Management is done by people through people and for people. It is a social process because it is concerned with interpersonal relations. Human factor is the most important element in management. According to Appley, “Management is the development of people not the direction of things. A good manager is a leader not a boss.

It is the pervasiveness of human element which gives management its special character as a social process”. Management is multidisciplinary: Management has to deal with human

behaviour under dynamic conditions. Therefore, it depends upon wide knowledge derived from several disciplines like engineering, sociology, psychology, economics, anthropology, etc. The vast body of knowledge in management draws heavily upon other fields of study.

Management is a continuous Process: Management is a dynamic and an on-going process. The cycle of management continues to operate so long as there is organised action for the achievement of group goals. Management is Intangible: Management is an unseen or invisible force. It cannot be seen but its presence can be felt everywhere in the form of results. Management is an Art as well as Science: It contains a systematic body of theoretical knowledge and it also involves the practical application of such knowledge. Management is also a discipline involving specialised training and an ethical code arising out of its social obligations. On the basis of these characteristics, management may be defined as a continuous social process involving the coordination of human and material resources in order to accomplish desired objectives.

Theories of Organisation

Organisation theory explains the structure, functioning and performance of organisation and the behaviour of individual and groups within it.

The various organisation theories are:

Classical theory

The classical theory deals with each and every part of a formal organisation and was given by Frederick W. Taylor. This theory is based on four principles as given below:

- **Division of labour:** The work is assigned to a person according to his/her specialisation and the area of interest which results in maximum production with minimum expenses incurred and minimum capital employed.
- **Scalar and functional processes:** The scalar process deals with the growth of organisation vertically whereas the functional process deals with the growth of the organisation horizontally. The scalar chain defines the success of domination by the superior on the subordinate from top to bottom of organisation.
- **Structure:** Organisational structure is a tool for creating a relationship among the various functions which make up the organisation. The two main issues in the design of the organisation are
- **Specialisation:** which is obtained when a person is asked to do a single work and it results in the increase in productivity

- **Coordination:** is an orderly performance in operations to achieve organisational objectives.
- **Span of control:** It defines the effective supervision of maximum number of employees by the supervisor.

Drawbacks of classical theory:

- based on authoritarian approach
- does not give two way communication
- do not care about human element in an organisation
- neglects the importance of informal groups
- ignores the influence of external factors on individual behavior

Neo-Classical Theory

This theory is developed to fill the gaps in the classical theory. The main contribution of the theory is that it highlights the importance of the committee management and better communication. Contributions made by Neo-Classical theory are as under:

- an individual should be the basis of an organisation
- organisation should be viewed in totality
- individual and organisational goals should be integrated
- employees should be allowed to participate in defining work standards and decision making
- management should recognize the existence of informal organisation

Drawbacks of Neo-Classical Theory

- The theory did not provide the clear guidelines for the actual structuring of jobs and provision for co- ordination
- The companies found little or almost nothing useful in this theory.

Modern Theory

This theory was organised in early 1950s. Following aspects are studied in this theory.

- interaction among the individuals in the system
- interaction between an individual and the environment
- studies an individual independently within and outside the system

Essentials of Modern Theory:

- views organisation as a whole
- based on system analysis
- concentrates on both quantitative and behavioural science

- integrating in nature
- based on empirical research

Drawbacks of Modern Theory:

- this theory does not provide solution to the issues raised by the theory itself
- it does not provide any new concept; work on the old management theories

Motivation Theory

It is concerned with the study or work motivation of employees of the organisation. The works are performed effectively if proper motivation is given to the employees. The motivation may be in monetary and non-monetary terms. The inner talents of any person can be identified after giving adequate motivation to employees. Maslow's hierarchy of needs theory and Honberg's two factor theory are some of the examples of the motivation theory.

Decision Theory

This theory was given by Herbert A. Simon. He regarded organisation as a structure of decision makers. The decisions were taken at all levels of the organisation and important decisions like policy decisions are taken at the higher levels of organisation. He suggested that the organisational structure be designed through an examination of the points at which decisions must be made and the persons from whom information is required if decisions should be satisfactory.

Types of Organisations

Line Organisation

Line organisation is the simple and the oldest type of an organisation, where the decision making authority flows from top to bottom. As shown in the Figure below:

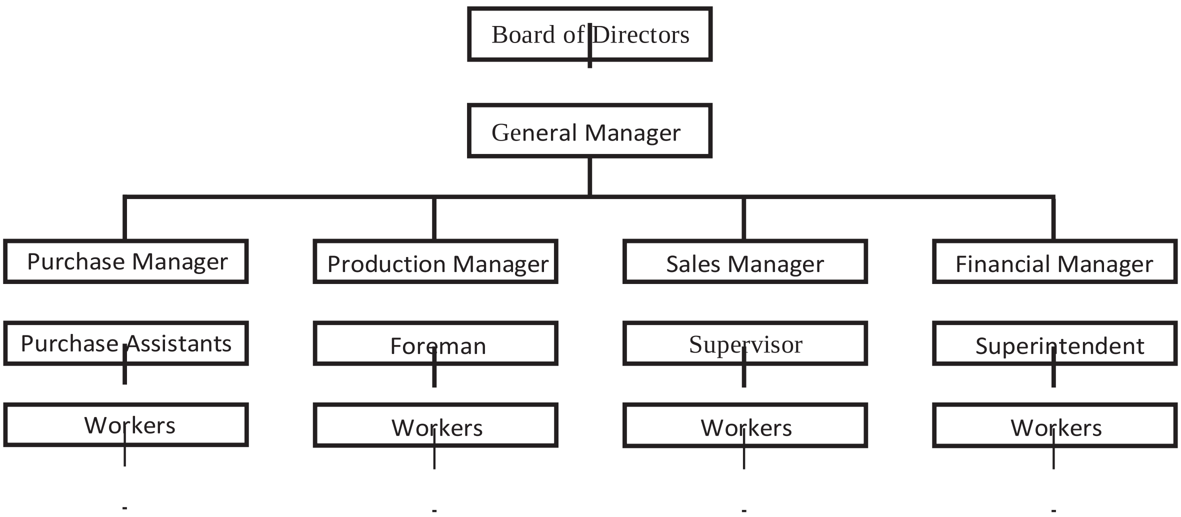


Fig. Line organisation

Characteristics of line organisation

- Consists of vertical relationships.
- Authority flows from top to bottom level.
- Departmental heads are given full freedom to control their departments.
- Operation of this system is very easy.
- Each member has direct command over his subordinates.

- The superior takes decisions within the scope of his authority.

Advantages of line organisation

- Simplicity
- Division of authority and control
- Unity of control
- Discipline
- Flexibility
- Direct communication
- Coordination

Disadvantages of line organisation

- Lack of specialisation
- Lack of initiatives
- Dictatorial
- Scope of favouritism

Functional Organisation

Functional organisation was proposed by F. W. Taylor, to overcome the limitations of line organisation. This type of organisation has various specialists for various functions. The directions of work are decided by functions and not mere authority. The workers under a functional unit are accountable not only to the functional specialist but to the other specialists as well as from whom they receive instructions.

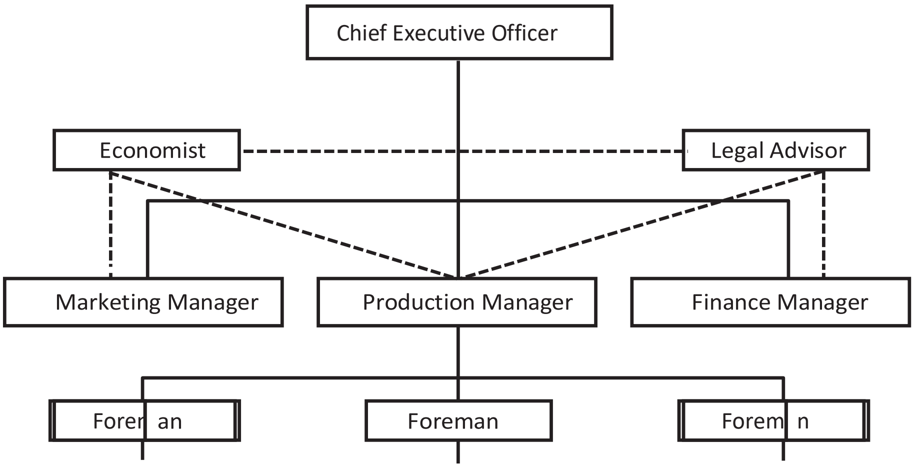


Fig Line and staff organisation

Functional organisation Characteristics of functional organisation

- The work is divided according to the specified functions
- Authority is given to the specialist to give orders to a specific function
- Functional authority can give orders throughout the line with reference to specified area
- The decisions are taken in consultation with the functional authority.

Advantages of functional organisation

- Benefit of specialisation
- Efficiency
- Adequate supervision
- Reduce the work load
- Cooperation

Disadvantages of functional organisation

- Complex relationship
- Centralization
- Ineffective coordination
- Increase overhead expenses
- Lack of responsibility

Line and Staff Organisation

Line and staff organisation has tried to use the advantages of both the line and the functional type of organisation to overcome their demerits.

Line and staff organisation have line officers as well as the staff officers.

Line officers have the authority to take decisions and implement them to achieve the objectives of the organisation whereas staff officers assist line officers in framing the policies, plans and taking decisions.

Types of staff

- **Personal staff**: A person who assists another person in the performance of a work effectively. They are appointed at top level of organisation.
- **Specialized staff**: These officers render services to the line officers at all levels of the organisation.
- **General staff assistant:** These are the groups of people who provide service to top management in specialized matters.

Advantages of line and staff organisation

- Promotes efficient working of line officers
- Balanced decisions
- Expert advice
- Benefit of specialisation
- Unity of action

Disadvantages of line and staff organisation

- line and staff conflicts
- in case of communication gap between line and staff officers the degree of cooperation among them decreases
- there is no such authority with the staff officers which can compel line officers to accept their decisions

Matrix Organisation

Matrix organisation is defined as "Any organisation that employs a multiple command structure but also relates support mechanisms and an organisational culture and behaviour pattern.**".**

Characteristics of matrix organisation

- Project manager should report to more than one of the superiors.
- There should be agreement between the managers regarding the authority of utilizing the available resources.
- There should be common willingness among the authority holders to face the conflicts with a view to resolve them.

Advantages of matrix organisation

- achievement of objectives
- best utilisation of resources
- appropriate structure
- flexibility
- motivation

Disadvantages of matrix organisation

- complex relationship
- struggle for power
- excessive emphasis on group decision-making
- arising conflict resolution
- heterogeneous

Organisation Charts and Manuals

Organisation charts are prepared for the purpose of describing the organisation structure. These are the devices showing the organisational relationships and activities within an organisation. An organisation chart is diagrammatic representation of the framework or structure of an organisation. There are four types of organisation charts as given below:

- vertical chart
- horizontal chart
- circular chart
- master and supplementary charts

Organisation manual is a document prepared in an organisation to furnish information on a particular organisation. It is a small book which contains the information regarding the organisation structure, duties and responsibilities of each position, job, description, salaries, prevailing relationships among members including organisation procedures and methods.

Contents of Organisation Charts

The following are the contents of the organisation chart:

- basic organisation structure and flow of authority
- authority and responsibilities of various executives
- the relationship between the line and staff officers
- names of components of organisation
- positions of the various office personnel
- number of persons working in an organisation
- the present and proposed organisation structure
- the requirements of management development
- salary particulars

Contents of Organisation Manual

The following are the contents of the organisational manual:

- full name and address of the organisation
- telephone number of the organisation
- address of the branch office, if any
- address of the showrooms, if any
- name and address of the top executive personnel
- a brief explanation regarding the organisation structure
- important sections or departments of the organization
- duties and responsibilities of the executives
- information regarding the unity of command
- rules and regulations regarding leave, promotion, transfer and the like
- procedures followed in accounting, costing etc
- important decisions taken by the management date-wise
- specimen forms used in the office
- company organisational charts

Unit 3:-Decision Making

Decision Making Environment: - The quality of the decisions made in an organization will dictate the success or failure of the said business.So all the available information and alternatives must be studied before arriving at an important decision. The process of decision making will help a great deal.Another factor that affects these decisions is the environment in which they are taken. There are a few different types of environments in which these decisions are made.And the type of decision making environment has an impact on the way the decision is taken. Broadly there are three basic types of decision making environment. Let us take a brief look at each of them

Certainty

Such type of environment is very sure and certain by its nature. This means that all the information is available and at hand. Such data is also easy to attain and not very expensive to gather.
So the manager has all the information he may need to make an informed and well thought out decision. All the alternatives and their outcomes can also be analyzed and then the manager chooses the best alternative.

Another way to ensure an environment of certainty is for the manager to create a closed system. This means he will choose to only focus on some of the alternatives.

In the decision making environment of uncertainty, the information available to the manager is incomplete, insufficient and often unreliable.

In these times of chaos, all the variables change fast. But the manager has to make sense of this mayhem to the best of his ability. He must create some order, obtain some reliable data and make the best decision as per his judgment.

Risk

Under the condition of risk, there is the possibility of more than one event taking place. Which means the manager has to first ascertain the possibility and probability of the occurrence or non-occurrence of the event.

The manager will generally rely on past experiences to make this deduction.

In this scenario too, the manager has some information available to him. But the availability and the reliability of the information is not guaranteed. He has to chart a few alternative courses of actions from the data he has.

The following are the main types of decisions every organization need to take:

1. ***Programmed and non-programmed decisions:***

Programmed decisions are concerned with the problems of repetitive nature or routine type matters.

A standard procedure is followed for tackling such problems. These decisions are taken generally by lower level managers. Decisions of this type may pertain to e.g. purchase of raw material, granting leave to an employee and supply of goods and implements to the employees, etc. Non-programmed decisions relate to difficult situations for which there is no easy solution.

These matters are very important for the organisation. For example, opening of a new branch of the organisation or a large number of employees absenting from the organisation or introducing new product in the market, etc., are the decisions which are normally taken at the higher level.

2. Routine and strategic decisions:

Routine decisions are related to the general functioning of the organisation. They do not require much evaluation and analysis and can be taken quickly. Ample powers are delegated to lower ranks to take these decisions within the broad policy structure of the organisation.

Strategic decisions are important which affect objectives, organisational goals and other important policy matters. These decisions usually involve huge investments or funds. These are non-repetitive in nature and are taken after careful analysis and evaluation of many alternatives. These decisions are taken at the higher level of management.

3. Tactical (Policy) and operational decisions:

Decisions pertaining to various policy matters of the organisation are policy decisions. These are taken by the top management and have long term impact on the functioning of the concern. For example, decisions regarding location of plant, volume of production and channels of distribution (Tactical) policies, etc. are policy decisions. Operating decisions relate to day-to-day functioning or operations of business. Middle and lower level managers take these decisions.

An example may be taken to distinguish these decisions. Decisions concerning payment of bonus to employees are a policy decision. On the other hand if bonus is to be given to the employees, calculation of bonus in respect of each employee is an operating decision.

4. Organisational and personal decisions:

When an individual takes decision as an executive in the official capacity, it is known as organisational decision. If decision is taken by the executive in the personal capacity (thereby affecting his personal life), it is known as personal decision.

Sometimes these decisions may affect functioning of the organisation also. For example, if an executive leaves the organisation, it may affect the organisation. The authority of taking organizational decisions may be delegated, whereas personal decisions cannot be delegated.

5. Major and minor decisions:

Another classification of decisions is major and minor. Decision pertaining to purchase of new factory premises is a major decision. Major decisions are taken by top management. Purchase of office stationery is a minor decision which can be taken by office superintendent.

6. Individual and group decisions:

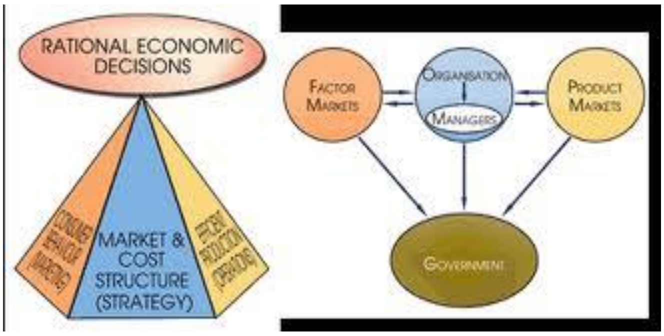
When the decision is taken by a single individual, it is known as individual decision. Usually routine type decisions are taken by individuals within the broad policy framework of the organisation.

Group decisions are taken by group of individuals constituted in the form of a standing committee. Generally very important and pertinent matters for the organisation are referred to this committee. The main aim in taking group decisions is the involvement of maximum number of individuals in the process of decision- making.

Unit 4:-Managerial Economics

Factors Influencing Managerial Economics:-

Managerial economics is basically applied in decision making. Managers, at an initial, make a particular decision to get a desired surplus or to reach the desired objective.It is the control over the actions of human beings for the purpose of achieving pre- determined goal. Management itself is a decision making body. Decision making is essential for **planning, analysing, actuating and controlling**. It is basically applied to analyse business problems and forward planning of management. Over the years, managerial economics have solved various business related problems.



managerial economics

Coming towards the influencial factors,there are basically 3 factors that influence the managerial economics. These are

1) Human and behavioural consideration:- At times we see that managers decide to remain small or do not diversify even though they have enough opportunities waiting ahead.This is because they feel that such expansion can strain or hinder their life to an extent. So, their first and foremost aim is to take into account personal consideration and economic logic before reaching to a particular decision.

2) Technological factors:- The enhancement of technology play a major role in managerial economics. Managers usually consider new technologies whether it is planning, decision making or any major investment.Technology marks the security of a particular information. Data can be more protected and preserved. Use of internet can be done to broaden a market and reach new customers.So the technological factors cannot be ignored before reaching to a relevent decision.

3) Environmental factors:- The force of environmental considerations is growing stronger day by day. Public awareness of the effect of firm level decisions on society is spreading. The various community organizations, political parties are increasingly concerned about the effects of these decisions and will

constantly push forward their points which may conflict with the purely economic viewpoint of the enterprise.
Furthur, environmental factors can be any. as an example, skilled people are not available for completing the project. Sometimes the people available does not possess a right ability for completion of a particular project. Or there can be undesirable environmental changes such as disasters or economic shifts can affect the completion of a project. So, the leaders and managers need to alert for such unexpected environmental change.

How is decision making related to managerial economics?

- How technological factors influence decision making?
- Managers need to keep personal and economic logic before reaching to a particular decision. Comment on this statement.
- What are the environmental factors which influence managerial eco

Microeconomics vs. Macroeconomics: An Overview
Economics is divided into two different categories: microeconomics and macroeconomics. Microeconomics is the study of individuals and business decisions, while macroeconomics looks at the decisions of countries and governments.
While these two branches of economics appear to be different, they are actually interdependent and complement one another. Many overlapping issues exist between the two fields.

KEY TAKEAWAYS

- Microeconomics studies individuals and business decisions, while macroeconomics analyzes the decisions made by countries and governments.
- Microeconomics focuses on supply and demand, and other forces that determine price levels, making it a bottom-up approach.
- Macroeconomics takes a top-down approach and looks at the economy as a whole, trying to determine its course and nature.
- Investors can use microeconomics in their investment decisions, while macroeconomics is an analytical tool mainly used to craft economic and fiscal policy.

Microeconomics

Microeconomics is the study of decisions made by people and businesses regarding the allocation of resources and prices of goods and services. It also takes into account taxes, regulations, and government legislation.

Microeconomics focuses on supply and demand and other forces that determine the price levels in the economy. It takes what is referred to as a bottom-up approach to analyzing the economy. In other words, microeconomics tries to understand human choices, decisions, and the allocation of resources.

Having said that, microeconomics does not try to answer or explain what forces should take place in a market. Rather, it tries to explain what happens when there are changes in certain conditions.

For example, microeconomics examines how a company could maximize its production and capacity so that it could lower prices and better compete in its industry. A lot of microeconomic information can be gleaned from the financial statements.

Microeconomics involves several key principles including (but not limited to):

- **Demand, Supply, and Equilibrium**: Prices are determined by the theory of supply and demand. Under this theory, suppliers offer the same price demanded by consumers in a perfectly competitive market. This creates economic equilibrium.
- **Production Theory**: This principle is the study of how goods and services are created or manufactured.

- **Costs of Production**: According to this theory, the price of goods or services is determined by the cost of the resources used during production.
- **Labor Economics**: This principle looks at workers and employers, and tries to understand the pattern of wages, employment, and income.

The rules in microeconomics flow from a set of compatible laws and theorems, rather than beginning with empirical study.

Macroeconomics examines economy-wide phenomena such as gross domestic product (GDP) and how it is affected by changes in unemployment, national income, rate of growth, and price levels.

Macroeconomics analyzes how an increase or decrease in net exports affects a nation's capital account, or how GDP would be affected by the unemployment rate.

Macroeconomics focuses on aggregates and econometric correlations, which is why it is used by governments and their agencies to construct economic and fiscal policy. Investors of mutual funds or interest-rate-sensitive securities should keep an eye on monetary and fiscal policy. Outside of a few meaningful and measurable impacts, macroeconomics doesn't offer much for specific investments.

John Maynard Keynes is often credited as the founder of macroeconomics, as he initiated the use of monetary aggregates to study broad phenomena.[1] Some economists dispute his theory, while many of those who use it disagree on how to interpret it.

- Cost Theory – Types of Costs
    - A. Fixed Cost
    - B. Average Fixed Cost
    - C. Variable Costs
    - D. Marginal Cost
    - E. Total Cost
    - F. Average Total Cost
- Difference between Fixed and Variable Costs
    - The decision to Shut Down the Firm
    - Break-Even Point

Fixed Cost

Fixed costs are costs that do not vary with different levels of production and fixed costs exists even if output is zero. Example: rent or salaries.In the above diagram, the fixed cost remains constant regardless of the quantity produced.

Average Fixed Cost
Average Fixed Cost = Fixed Costs/Quantity.

Variable Costs
Variable Costs are costs that vary with the level of output. Ex: electricity

Marginal Cost
Marginal Cost is the increase in cost caused by producing one more unit of the good.
The Marginal Cost curve is U shaped because initially when a firm increases its output, total costs, as well as variable costs, start to increase at a diminishing rate. At this stage, due to economies of scale and the Law of Diminishing Returns, Marginal Cost falls till it becomes minimum. Then as output rises, the marginal cost increases.

Total Cost
Total Cost = Fixed Cost + Variable Cost
When the output is zero, variable costs are also zero. But we have fixed costs which is where the Total Costs start. The Total Cost remains parallel to the Variable Cost, and the distance between the two curves is the Fixed Cost.

Average Total Cost
Average Total Cost = Total Cost/Quantity. (Total Cost = Fixed Cost + Variable Cost)
Average Variable Cost = Variable Costs/Quantity.
Marginal Cost, Average Cost, Average Variable Cost
Note: If average costs are falling then marginal costs must be less than average while if average costs are rising then marginal must be more than average. Marginal cost on its way up must cut the cost curve at its minimum point.
If Marginal Cost is less than Average Variable Cost, then the Average Cost goes down.
If Marginal Cost is higher than Average Variable Cost, then the Average Cost goes up.
If Marginal Cost is equal to Average Variable Cost, then the Average Cost will be at a minimum.
Difference: - This distinction is important in cost theory. Every firm has the object to maximize profits or minimize losses if losses are unavoidable. At times the price of the product may not cover the average total cost. Then the firm will have to decide whether to shut down or produce some output.

1. The decision to Shut Down the Firm
The producer may not cover the total costs if the price of the product is less than the short-run average cost. Then the distinction between fixed cost and variable cost is important.
If the price does not cover average variable costs, the firm prefers to shut down. In other words, if the total revenue (total sale proceeds) does not include total variable costs, the business must shut down. Otherwise, its total loss will be higher than the fixed costs. It will produce something only when the price covers

the average variable cost and part of the average fixed costs. The output at which marginal cost is equal to marginal revenue keeps losses minimum.

2. Break-Even Point

At times the firm may not make any profit. It just pays to produce a given output. Total revenue is only equal to the total cost. The company has crossed the losses zone and is about to enter the zero profit zone. The output at which total revenue becomes equal to total cost represents the break-even point.

Unit 5:- Productivity

What Is Input-Output Analysis

Input-output analysis ("I-O") is a form of macroeconomic analysis based on the interdependencies between economic sectors or industries. This method is commonly used for estimating the impacts of positive or negative economic shocks and analyzing the ripple effects throughout an economy. This type of economic analysis was originally developed by Wassily Leontief (1905–1999), who later won the Nobel Memorial Prize in Economic Sciences for his work in this area.

The foundation of I-O analysis involves input-output tables. Such tables include a series of rows and columns of data that quantify the supply chain for all sectors of an economy. Industries are listed in the headers of each row and each column. The data in each column corresponds to the level of inputs used in that industry's production function. For example, the column for auto manufacturing shows the resources required for building automobiles (e.g., so much steel, aluminum, plastic, electronics, and so on). I-O models typically include separate tables showing the amount of labor required per dollar unit of investment or production. While input-output analysis is not commonly utilized by neoclassical economics or by policy advisers in the West, it has been employed in Marxist economic analysis of coordinated economies that rely on a central planner.

Three Types of Economic Impact

I-O models estimate three types of impact: direct, indirect, and induced. These terms are another way of referring to initial, secondary and tertiary impacts that ripple throughout the economy when a change is made to a given input level. By using I-O models, economists can estimate the change in output across industries due to a change in inputs in one or more specific industries.

- The direct impact of an economic shock is an initial change in expenditures. For example, building a bridge would require spending on cement, steel, construction equipment, labor, and other inputs.
- The indirect, or secondary, impact would be due to the suppliers of the inputs hiring workers to meet demand.

- The induced, or tertiary, impact would result from the workers of suppliers purchasing more goods and services. This analysis can also be run in reverse, seeing what effects on inputs were likely the cause of observed changes in outputs.

Example

Here's an example of how I-O analysis works: A local government wants to build a new bridge and needs to justify the cost of the investment. To do so, it hires an economist to conduct an I-O study. The economist talks to engineers and construction companies to estimate how much the bridge will cost, the supplies needed, and how many workers will be hired by the construction company. The economist converts this information into dollar figures and runs numbers through an I-O model, which produces the three levels of impacts. The direct impact is simply the original numbers put into the model, for example, the value of the raw inputs (cement, steel, etc.). The indirect impact is the jobs created by the supplying companies, so cement and steel companies. The induced impact is the amount of money that the new workers spend on goods and services.

Productivity:-

Productivity refers to the physical relationship between the quantity produced (output) and the quantity of resources used in the course of production (input). "It is the ratio between the output of goods and services and the input of resources consumed in the process of production."

Productivity =output/input

Output implies total production while input means land, labour, capital, management, etc. Productivity measures the efficiency of the production system. The efficiency with which resources are utilized is called productive efficiency. Higher productivity means producing more from a given amount of inputs or producing a given amount with lesser inputs.

Factor affecting to productive

1. Human:

Human nature and human behaviour are the most significant determinants of productivity.

Human factors may further be classified into two categories as given below:

(a) Ability to work – Productivity of an organization depends upon the competence and calibre of its people—both workers and managers. Ability to work is governed by education, training, experience, aptitude, etc. of the employees.

(b) Willingness to work – Motivation and morale of people is the second important group of human factors that determine productivity. Wage incentive schemes, labour participation in management, communication system, informal group relations, promotion policy, union management relations, quality of leadership, etc., are the main factors governing employees' willingness to work. Working conditions like working hours, sanitation, ventilation, schools, clubs, libraries, subsidized canteen, company transport, etc., also influence the motivation and morale of employees.

2. Technological:

Technological factors exercise significant influence on the level of productivity.

The main technological factors are as follows:

(a) Size and capacity of plant

(b) Product design and standardization

(c) Timely supply of materials and fuel

(d) Rationalization and automation measures

(e) Repairs and maintenance

(f) Production planning and control

(g) Plant layout and location

(h) Materials handling system

(i) Inspection and quality control

(j) Machinery and equipment used

(k) Research and development

(l) Inventory control

(m) Reduction and utilization of waste and scrap, etc.

3. Managerial:

The competence and attitudes of managers have an important bearing on productivity. In many organizations, productivity is low despite latest technology and trained manpower. This is due to inefficient and indifferent management. Competent and dedicated managers can obtain extraordinary results from ordinary people.

Job performance of employees depends on their ability and willingness to work. Management is the catalyst to create both. Advanced technology requires knowledge workers who in turn work productively under professionally qualified managers. No ideology can win a greater output with less effort. It is only through sound management that optimum utilization of human and technical resources can be secured.

4. Natural:

Natural factors such as physical, geological, geographical and climatic conditions exert considerable influence on productivity, particularly in extractive industries. For example, productivity of labour in extreme climates (too cold or too hot) tends to be comparatively low. Natural resources like water, fuel and minerals influence productivity.

5. Sociological:

Social customs, traditions and institutions influence attitudes towards work and job. For instance, bias on the basis of caste, religion, etc., inhibited the growth of modern industry in some countries. The joint family system affected incentive to work hard in India. Close ties with land and native place hampered stability and discipline among industrial labour.

6. Political:

Law and order, stability of Government, harmony between States, etc. are essential for high productivity in industries. Taxation policies of the Government influence willingness to work, capital formation,

modernization and expansion of plants, etc. Industrial policy affects the size, and capacity of plants. Tariff policies influence competition. Elimination of sick and inefficient units helps to improve productivity.

7. Economic:

Size of the market, banking and credit facilities, transport and communication systems, etc. are important factors influencing productivity.

Productivity is an economics term which refers to the ratio of product to what is required to produce the product. Productivity is outcome of several interrelated factors. All the factors which are related to input and output components of a production process are likely to affect productivity.

So, there are many factors which can influence productivity; such as internal and external. Knowing the internal and external factors that affect productivity of an Industrial organization; give industrial engineers; the intelligence, they needs to sort out the low performance of resources and make strategic plans for the future.

The best thing about internal factors is that you can control many of them. External factors are all those things that are beyond your control. To deal with all these factors we need different people and variety of techniques and methods.

Some of the Other Factors

The factors influencing productivity can be classified broadly into two categories:

(A) Controllable Factors.

(B) Uncontrollable Factor.

(A) Controllable Factors:

Controllable Factors are considered as internal factors. These are the factors which are in control of industrial organization.

Controllable factors are:

1. Material and Power:

Improved quality of raw materials and increased use of power have a favorable effect on productivity. An effort to reduce materials and energy consumption brings about considerable improvement in productivity.

It consist:

i. Selection of quality material and right material.

ii. Control of wastage and scrap.

iii. Effective stock control.

iv. Development of sources of supply.

v. Optimum energy utilization and energy savings.

2. Machinery and Plant Layout:

The size of the plant and the capacity utilization has direct bearing on productivity. Production below or above the optimum level will be uneconomical and will tend towards lower level of productivity. The arrangement of machines and position in the plant and the setup of the wore-bench of an individual worked will determine how economically and efficiently production will be ferried out.

3. Human Factors:

Human nature and human behavior are the most significant determinants of productivity. Human factors include both their ability as well as their willingness.

i. Ability to Work:

Ability to work is governed by education, training, experience and aptitude of the employees. Productivity of an organization depends upon the competence and caliber of its people (both workers and managers).

ii. Willingness to Work:

Motivation and morale of people are very important factors that determine productivity. These are affected by wage incentive schemes, labour participation in management, communication systems, informal group relations, promotion policy, union Management relations, quality of leadership, working hours, sanitation, ventilation, subsidized canteen and company transport etc.

4. Organization and Managerial Factors:

Organization factor include various steps taken by the organization towards maintaining better industrial relations such as delegation and decentralization of authority. These factors also influence motivation likewise the existence of group, with higher productivity as their goal is likely to contribute to the organization objectives.

The competence and attitudes of managers have an important bearing on productivity. Competent and dedicated managers can obtain extraordinary results from ordinary people. Job performance of employees depends on their ability and willingness to work.

5. Technological Factors:

Technological factors exert significant influence on the level of productivity.

These include the following:

i. Size and capacity of plant

ii. Product design and standardization

iii. Production planning and control

iv. Plant layout and location

v. Materials handling system

vi. Inspection and quality control

vii. Machinery and equipment used

viii. Research and development

(B) Uncontrollable Factors:

Uncontrollable factors are known as external factors and these factors are beyond the control of the individual industrial organization.

Uncontrollable factors are:

1. Economic Political and Social Changes:

There are economic, social and political factor that affects the productivity.

i. Economic Factors like Size of the market, banking and credit facilities, transport and communication systems, etc. is important factors influencing productivity.

ii. Political Factors like Law and order, stability of government, harmony between states etc. are essential for high productivity in industries Taxation policies of the government influence willingness to work, capital formation, modernization and expansion of plants etc. Industrial policy affects the size, and capacity of plants. Elimination of sick and inefficient units also helps to improve productivity.

iii. Social Factors like Social customs, traditions and institutions influence attitudes towards work and job. For instance, bias on the basis of caste, religion, etc., inhibited the growth of modern industry in some countries. The joint family system affected incentive to work hard in India. Close ties with land and native place hampered stability and discipline among industrial labour.

2. Natural Resources:

Natural factors such as physical, geographical and climate conditions exert considerable influence on productivity, particularly in extreme climates (too cold or too hot) tends to be comparatively low. Natural resources like water, fuel and minerals influence productivity.

3. Government Factor:

Government policies and programs are significant to productivity practices of government agencies, transport and communication power, and fiscal policies (interest rates, taxes) influence productivity to the greater extent.