Unit - 3 Significance and Principles of Effective Management

Structure of Unit

3.0 Objectives

After completing this unit you must be able to :

- Discuss the significance management to business, industry and national economy.
- State the major qualities of a good manager.
- Elaborate general administrative principles given by Henry Fayol.
- Critically examine F.W. taylors scientific management.

3.1 Introduction

As it is said by few philosophers, those things that do not change, loses its existence, it is equally applicable to the study of an organization. Furthermore even experts in the field of management do not have conciliation for the concrete definition, and concept of management. It is because of the fact that the field is so versatile, organic and complex that one cannot study it from one perspective or even few. Principles, rules and guidance of the field of management is so versatile that we find its pervasiveness everywhere. They guide in probably all the situations, but their interpretation keep on changing in every such situation and from person to person. Management, as a unique field of study, is a synergy of economics, political science, human psychology, anthropology, operation research and statistics as well as sociology. Therefore it is to be understood from all these perspectives. The study becomes more dynamic since it is applicable in a vibrant, ever changing and complex environment.

3.2 Significance and Importance of Management to The Business, Industry, Society & Economy

Introduction: For correct application of the management principles, study of commerce, economics, sociology, psychology and mathematics is very essential. For better discipline in the whole organisation, management must adopt an inter-disciplinary approach which is very essential due to complexity of business organisation.The principles of management have universal application, Business organisation, industry, trade, commerce, educational, religious, charitable, political and social institutions etc. can be run successfully and efficiently by applying modern principles and techniques of management everywhere. Scientific methodology must be adopted while applying management principles. Management must concentrate on human relations and follow quantitative technique for productivity as well. The technique of management can be improved by proper research and development. Due to fast changes within and outside the business organisations, improved and appropriate techniques of management must be developed through research. Proper outcome of all the management areas and their functions can lead the organisation to the everest of alround success.

Following points will elaborate the importance.

1. **Management Meets the Challenges of Changes:** In the era of globalisation, liberalisation, computerisation, privatisation and multinationals, fast and growing changes are taking place. In recent years the challenge of change has become intense and critical. This challenge of changes can be met by professional and efficient management only. Complexities of modern business can be overcome only by scientific management.
2. **Effective, efficient and profitable utilisation of the seven M's:** In this era two M's (Methods, Markets) are added to traditional M's i.e. men, materials, money, machines and management. Among all these seven, management stands at the top. It determines and controls all other factors of business, and manages them for achieving the predetermined objectives and goals of the organisation.
3. **Development of resources:** Good management always tries for development of other resources. It produces good business by creating a vital, dynamic and life giving force in the organisation.
4. **Management directs the organisation:** Role of management as a director is very important. For instance, mind directs and controls the body to fulfill its desires, like wise management directs and controls all the organs of organisation to achieve the desired goals.
5. **Management integrates various interests:** Business organisation activities are carried out by working groups, involving a number of individuals. There are various interest groups and they put pressure over other groups for maximum share in the total output. Management balances these pressures and integrates various interests. Interest of the business organisation and that of the individuals is integrated by the management in such a way, that interests of both the parties are achieved. As a result both the parties are satisfied and work together happily in the organisation.
6. **Management provides stability:** Smooth and continuous running of business organisation depends upon the efficiency of management. Degree of stability of any organisation is positively correlated with the degree of efficiency shown and adopted by the management. It is necessary to change and modify the resources in accordance with the changing environment of the society. If the business enterprises do not change according to the changing environment, their stability may be in danger.
7. **Management provides innovation:** Innovation is a must for business and industry. Otherwise it becomes rigid and outdated. Innovation requires new ideas, improved or new suggestions, new dimension, new vision, excellent imagination etc. All this is provided by management, which makes the business and industry modern, live and dynamic.
8. **Management provides coordination and establishes team spirit:** In an organisation, different activities are performed by different departments. A large number of activities are going on continuously and/or simultaneously in a business enterprise. The management only, has to coordinate all these activities and establish team-spirit among the working groups. Coordination in activities, maintaining and establishing team spirit, is a great task to be done by management alone.
9. **Management tackles business problems:** Management is the only instrument with the enterprise to tackle all sorts of problems of business enterprises. Management possesses the skill for tackling the variety of problems. It very well knows how to face the critical problems of the organisation like competition of technology, problem of marketing, problem of human resources, physical resources, financial resources and so on. It provides a tool for the best way of doing a task.

10. **Management is a tool of personality development :** Management attempts to improve the personality of personnel. Management is not only for the direction of things but the development of men also. Management is always searching new ways and means for developing the personality of the employees. It tries to develop alround personality of employees through education training. It also attempts how to raise their efficiency and productivity. Managements' contribution in personality development of employees is indispensable.

11. **Importance of management in India's developing economy :** Our country is a developing country. Role of management in such situations and circumstances is very important. Total economics of a nation depends upon how the managers are giving their honest and loyal contribution for it. We have a small number of managers. Added to this is scarcity of professional managers as well as experienced managers. There is a great demand for professional managers, business executives to successfully run business enterprises. History of business reveals the fact that the complexity and sophistication of a business need professional management. There is a direct co-relation between the sophistication of business industry and the kind of management needed. For fast development of economy after industrial revolution, we are required to establish industries like machines, tools, equipments, electronics, engineering petrochemicals, chemicals, iron and steel, pharmaceuticals, cement, fertilisers, computers etc. and to manage these industries we need the managers with the ability to manage them successfully. These managers must have the knowledge of technical and scientific know-how, professional and administrative competence and dynamic personality. It is universally admitted that scientific training can build good managers. The managerial skills have to be acquired by training and education and the scientific managerial approach calls for initiative, entrepreneurship, goal setting drive and dynamism. Professional managers must have necessary training and ability to spot the problem areas and bring in together all the diffused talents of the various technical and professional experts such as engineers, scientists, economists psychologists, sociologists etc. to tackle the problem spots with confidence. If business administration and management is founded upon a science, if its practice is a profession, then in the near future we must expect its exponents to be men of high ability and perfect knowledge. Men who have graduated in their profession and are qualified thereby be entrusted with the responsibilities which its practice imposes. Thorough knowledge of the principles, and practice of business administration is needed for developing more good managers. Thus in short management is an essential accompaniment of all social organisations and it is to be found everywhere as a distinct, separate and dominan-for aptivity. Management is the custodian of the economic welfare of the community.

Activity A

1. "Management is all pervasive in nature "Critically examine validity of the statement by quoting practical illustrations of various formal and informal organizational setups.

3.3 Quality of Good Manager

Fayol was the first person to identify the qualities required in a manager. According to him, there are six types of qualities that a manager requires. These are as follows:

1. Physical (health, vigour, and address);
2. Mental (ability to understand and learn, judgement, mental vigour, and capability);

3. Moral (energy, firmness, initiative, loyalty, tact, and dignity);
4. Educational (general acquaintance with matters not belonging exclusively to the function performed);
5. Technical (peculiar to the function being performed); and
6. Experience (arising from the work).

Fayol has observed that the most important ability for a worker is. technical; the relative importance of managerial ability increases as one goes up the scalar chain, with insight becoming the most important ability for top level executives. On the basis of this conclusion, Fayol recognised a widespread need for principles of management and for management teaching. He held that managerial ability should be acquired first in school and later in the workshop. In order to acquire managerial knowledge, he developed principles of management to be taught in academic institutions.

3.4 Henry Fayol's General Principles of Management

Fayol has given fourteen principles of management. He has made distinction between management principles and management elements. While management principle is a fundamental truth and establishes cause-effect relationship, management element denotes the function performed by a manager. While giving the management principles, Fayol has emphasised two things: (i) The list of management principles is not exhaustive but suggestive and has"discussed only those principles which he followed on most occasions.(ii) Principles of management are not rigid but flexible. According to him, there is nothing rigid or absolute in management affairs; it is all question of proportion. Therefore, principles are flexible and capable of being adopted to every need. It is a matter of knowing how to make use of them which is a difficult art requiring intelligence, experience, and proportion. Various principles of management are as follows:

1. Division of Work. Fayol has advocated division of work to take the advantage of specialisation. According to him, specialisation belongs to natural order. The workers always work on the same part, the managers concerned always with the same matters, acquire an ability, sureness, and accuracy which increase their output. Each change of work brings in it training and adaptation which reduces output...yet division of work has its limits which experience and a sense of proportion teach us may not be exceeded. This division of work can be applied at all levels of the organisation.

2. Authority and Responsibility. The authority and responsibility are related, with the latter the corollary of the former and arising from it. Fayol finds authority as a continuation of official and personal factors. Official authority is derived from the manager's position and personal authority is derived from personal qualities such as intelligence, experience, moral worth, past services, etc. Responsibility arises out of assignment of activity. In order to discharge the responsibility properly, there should be parity of authority and responsibility.

3. Discipline. All the personnel serving in an organisation should be disciplined. Discipline is obedience, application, energy, behaviour, and outward mark of respect shown by employees. Discipline may be of two types: self-imposed discipline and command discipline. Self-imposed discipline springs from within the individual and is in the nature of spontaneous response to a skilful leader. Command discipline stems from a recognised authority and utilises deterrents to secure compliance with a desired action, which is expressed by established customs, rules and regulations. The ultimate strength of command discipline lies in its certainty of application.

4. Unity of Command. Unity of command means that a person should get orders and instructions from only one superior. The more completely an individual has a reporting relationship to a single superior, the less is the problem of conflict in instructions and the greater is the feeling of personal responsibility for results. This is contrary to Taylor's functional foremanship.

5. Unity of Direction. According to this principle, each group of activities with the same objective must have one head and one plan. Unity of direction is different from unity of command in the sense that the former is concerned with functioning of the organisation in respect of its grouping of activities or planning while the latter is concerned with personnel at all levels in the organisation in terms of reporting relationship.

6. Subordination of Individual to General Interest. Common interest is above the individual interest. Individual interest must be subordinate to general interest when there is conflict between the two. However, factors like ambition, laziness, weakness, etc., tend to reduce the importance of general interest. Therefore, superiors should set an example in fairness and goodness.

7. Remuneration of Personnel. Remuneration of employees should be fair and provide maximum possible satisfaction to employees and employers. Fayol did not favour profit sharing plan for workers but advocated it for managers.

8. Centralisation. Everything which goes to increase the importance of subordinate's role is decentralisation ; everything which goes to reduce it is centralisation. Fayol refers the extent to which authority is centralised or decentralised. Centralisation and decentralisation are the question of proportion. Since both absolute and relative values of managers and employees are constantly changing, it is desirable that the degree of centralisation or decentralisation may itself very constantly.

9. Scalar Chain. There should be a scalar chain of authority and of communication ranging from the highest to the lowest. It suggests that each communication going up or coming down must flow through each position in the line of authority. It can be short-circuited only in special circumstances when its rigid following would be detrimental to the organisation.

10. Order. This is a principle relating to the arrangement of things and people, material order, there should be a place for everything and every thing should be its place. Similarly, in social order, there should be the right man in the right place. This kind of order demands precise knowledge of the human requirements and resources of the organisation and a constant balance between these requirements and resources. Normally, bigger the size of the organisation, more difficult this balance is.

11. Equity. Equity is the combination of justice and kindness. Equity in treatment and behaviour is liked by everyone and it brings loyalty in the organisation. The application of equity requires good sense, experience, and good nature for soliciting loyalty and devotion from subordinates.

12. Stability of Tenure. No employee should be removed within short time. There should be reasonable security of jobs. Stability of tenure is essential to get an employee accustomed to new work and succeeding in doing it well. Unnecessary turnover is both cause and effect of bad management.

13. Initiative. Within the limits of authority and discipline, managers should encourage their employees for taking initiative. Initiative is concerned with thinking out and execution of a plan. Initiative increases zeal and energy on the part of human beings.

14. Esprit de Corps. This is the principle of 'union is strength' and extension of unity of command for establishing team work. The manager should encourage esprit de corps among his employees. The erring employees should be set right by oral directions and not by demanding written explanations. Written explanations complicate the matters.

Activity B:

1. Take any organization of your choice, for example, government setup, educational setup or business and examine practical applicability of Henry Fayol's 'Administrative Management'.

3.5 F.W. Taylor's Scientific Management

Introduction & Meaning –

F.W. Taylor came about the scientific management in 1910. He is called as the father of scientific management since his contribution to this concept was much more as compared to other experts. Scientific management is a concept which over came the weakness of the traditional hit and miss & rule of thumb method of managing works and workers. It is nothing but the acceptance and application of the method of scientific investigation for the solution of the problems of industrial management. Scientific investigation includes research and experimentation, collection of data, analysis of data and formulation of certain principles on the basis of such analysis. Scientific management tries to maximize the efficiency of the plant by using this method for its operations. Here the management undertakes the responsibility for deciding the proper standers and methods of work and providing for close supervision.

Elements of Science Management -

(1) Scientific task and wage rate setting : Taylor came out with the concept of standard task or a proper day's works. The standard task i.e. set by the management is the amount of work which an average worker, working under ideal standardize condition in an atmosphere and mutual trust and co-operation will be able to do in a day. He felt the need for setting a task since the average worker in a factory will usually work much below his capacity if no standard is set for him. Taylor assumed that a great care is required for setting the standard since, if the standard. are set much higher than the capacity of an ordinary worker, it will not be achieved and will results into frustration. On the other hand if the standard set are much lower than the average capacity the purpose is not served.

Work Study: In order to set standard for different task, work study is to be conducted. Work study can be defined as a systematic objectives and critical examinations of the factors governing (controlling) the operational efficiency of any specified activity in order to effect improvement. Following are the different elements of work study-

(i) Methods Study -Methods study is to be conducted for different job, so that the best method or the most efficient method of doing a particular job comes into pictures.For this the management should prepare a process chart setting out different operations. Management should take into consideration the moments of a particular job, materials, inspection and storage etc. If possible different operation should be combined and the unnecessary elements are to be removed.

(ii) Motion Study- Motion study is a study of the moments of an operator or worker as well as machine also, required in performing operation or a task. The main purpose isto remove or eliminate useless or unnecessary moments. This study helps in settingout a standard of performance. It tries to find out the best method for job performance which every worker is expected to follow.

(iii) Time Study- Time Study deals with the art of observing and recording the time required to each details operation of a job. It requires care full measurement of the time required for different Jobs and the purpose is to determine the proper time for performing the job.

(iv) Fatigue Study- Fatigue study deals with studying what an average. Man perform for long period of years without injuring to his health and happiness. Fatigues of all kinds physical or psychological are adversely affects the health and efficiency of the worker. Hence, the standard task should be set in such a way that the worker should get rest in between the continuous work and it should reduce the fatigue of boredom. The worker gets an opportunity to regain his energy which is lost in continuous work.

(v) Wage Rage Study- The setting of standard task is useless until the wages are fixed in such a manner that the average.worker is motivated to achieve/attain the standards. Taylor suggested that differential Piece Wage System under which workers performing more than the standard task are paid much higher that what is fixed.

(2) Planning The Task: Taylor stress on the planning aspect of every job. So that there are no bottlenecks and the work goes on systematic manner. Accordingly to him all the planning. departments should deal with the following four aspects:

(a) What is to be done?

(b) How the work shall be done?

(c) Where the work shall be done?

(d) When the work shall be done?

The production and the planning. Department should give detail instructions and information to their employees so that the work can be done according to the plans prepared.

(3) Scientific Selection & Training:

(i) Scientific Selection: Taylor put emphasis upon the methods and the procedures used for selecting the workers. Earlier the foreman used to select the workers on the basis of his own knowledge and judgment. Such selection will not necessary lead to the proper performance of the work. So Taylor suggested that the selection of the workers should be done in a very systematic way. Hence, he stress upon a scientific selection of worker, where in every worker is suppose to pass through the selection process designed and thus the most efficient worker are selected.

(ii) Scientific Placement: Once the selection is done in a systematic way than the placement of the selected worker is also equally important i.e. the worker should be placed on such jobs which matches with the skills, abilities and knowledge possessed by the worker and which is the same as demanded by the job requirements. Anymistakes committed in the proper placement of workers will lead to heavy losses.

(iii) Scientific Training & Development: Once the right worker is placed on the right job, again attention should be given to the trainings of the worker, so that he not only performs the job more efficiently but as well will update his knowledge and skills required for future jobs.

(4) Standardisation: Taylor stress upon the standardization of tools and equipments, speed of work, conditions of work and materials used to complete the work :

(i) Tools and Equipments: Taylor wanted to bring standardization related to the tools and equipment which are used for performing a work. This helps in bringing uniformity and will also avoid the use inferior quality of goods, there by adversely affecting the quality of the work. He classified the tools in to first class second class and third class and suggested that the management should select the best tools which properly match with the work concerned.

(ii) Speed of Work: According to Taylor, there should be optimum speed for every machine. If the machine is operated beyond that speed it will result in to the damage of the machinery. Hence he suggested that the most efficient speed at which the worker should work is to be determine that the work is perform in the most efficient way.

(iii) Condition of Worker: Taylor suggested standardization related to the working conditions which included verification, enough lighting, humidity, coolness, safety etc. These all are very essential since they effect the attitudes of the workers and there by their efficiency.

(iv) Materials: Apart from above mentioned factors, efficiency of the worker also depends upon the quality of materials used as well as the method of handling the materials. If the quality of material is inferior, uniformity of the quality of the product is not maintained. Also the best methods of handling the materials is to be determined so that there is a minimum wastage.

(5) Specialization: Specialisation is a very important feature related to standardization. Taylor suggested the following three elements in order to bring specialization:

(i) Functional Foremanship: In the traditional organizations, one foreman use to issue guideline and instruction to all the workers and the workers were suppose to follow them. What Taylor suggested is the planning. Function should be separated from the doing function i.e. he suggested functional foremanship. Because of functional foremanship, the person concerned specializes in the function performed by him. Since he is supposed to do the same job again and again.

(ii) Management by Exception: Taylor introduced the principle of Management By Exception wherein he try to reduce the workload of overburdened managers. What he suggested is that a manager should perform only the most important task and the least important or the less important task should be deligated to his subordinates so that he can take correct decisions with enough time on his side.

(iii) Cost Accounting: Cost accounting is concerned with the determination of factory cost and the cost of inventories. Cost accounting helps in the following ways:

1. It gives a historical view of the cost of production and its components.
2. It is used to control cost on various items of expenses connected with the manufacturing operations.
3. It is used as an important technique of estimation cost and budgeting.

(6) Mental Revolution: The two parties i.e. the employer and the employees have their own individual interest which are always in conflict to the other parties interest. If one party tries to maximise its interest, automatically the other party's interest is adversely affected & vice versa. So Taylor suggested to bring a mental revolution thereby bringing a change in the attitude and beliefs that both the parties have towards each others. He said that both the parties should try to increase the profit margin and should unctually agree to share the profit, so that interest of the both can be satisfied.

Principles of Scientific Management:

Taylor has given certain basic principles of scientific management. The fundamental principles that Taylor saw underlying the scientific management may be given below:

1. **Replacing Rule of Thumb with Science.** Taylor has emphasised that in scientific management, organised knowledge should be applied which will replace rule of thumb. While the use of scientific method denotes precision in determining any aspect of work, rule of thumb emphasises estimation. Since exactness of various aspects of work like day's fair work, standardisation in work, differential piece rate for payment, etc., is the basic core of scientific management, it is essential that all these

are measured precisely and should not be based on mere estimates. This approach can be adopted in all aspects of managing.

2. **Harmony in Group Action.** Taylor has emphasised that attempts should be made to obtain harmony in group action rather than discord. Group harmony sug-gests that there should be mutual give and take situation and proper understanding so that group as a whole contributes to the maximum.
3. **Co-operation.** Scientific management involves achieving co-operation rather than chaotic individualism. Scientific management is based on mutual confidence, co-operation and goodwill. Co-operation between management and workers can be developed through mutual understanding and a change in thinking. Taylor has suggested "substitution of war for peace, hearty and brotherly co-operation for con-tentment and strife, replacement of suspicious watchfulness with mutual confidence, of becoming friends instead of enemies. It is along this line, I say, that scientific management must be developed."
4. **Maximum Output.** Scientific management involves continuous increase in production and productivity instead of restricted production either by management or by worker. Taylor hated inefficiency and deliberate curtailment of production. His concern was with the large size of the cake. In his opinion, "there is hardly any worse crime to my mind than that of deliberately restricting output." He decried quarrel over production but welcomed quarrel over distribution, provided the product to be distributed had outgrown the size. Therefore, he advised the manage-ment and workers to "turn their attention towards increasing the size of the surplus until the size of the surplus becomes so large that it is necessary to quarrel over how it shall be divided."
5. **Development of Workers.** In scientific management, all workers should be developed to the fullest extent possible for their own and for the company's highest prosperity. Development of workers requires their scientific selection and providing them training at the workplace. Training should be provided to workers to keep them fully fit according to the requirernent new methods of working which may be different from the non-scientific methods.

Criticisms of Taylor's Scientific Management :

(1) **Unbalanced Approach :** Scientific Management is criticised for taking a partial view of the whole management function i.e. it focuses attention only on the problem of production management. However other management functions like maketing, finance are equally concerned with the integration of all the function and not some or few. Thus, scientific management is criticised for its unbalanced approach related to management functions.

(2) **Mechanical Approach :** Another criticism is that scientific mgt. focuses on the mechanical approach adopted towards the workers i.e. workers are more or less "automated' and are expected to work similar to machines. Infact , human approach is tobe adopted towards the workers. Workers should be allowed to participate with management thus the atmosphere cooperation can be generated.

(3) **Pessimistic assumption about human nature:** Scientific mgt. is also criticised for having pessimistic assumption (similar to theory x) , about human nature. It considers that humans basically lake ambition, are not hardworking and are lazy, do not like to take responsibility etc. These all are negative assumptions about human nature and because of this Taylor stressed upon close supervision and tight control over workers. In fact, this theory is too pessimistic and Douglas Mcgragor came out with theory-y against Theory-X which had all positive assumption related to human nature. He stressed upon MBO (Management By Objectives) and self control.

(4) **Exploitation of Worker:** This theory lead to exploitation of worker in the sense that by following Taylor's scientific management. the productivity though increased but still the wages of the workers

were not raised/or were in the same proportion. Thus, the workers were exploited by not allowing them to share in the high productivity.

(5) Problem of Monotony: Over-specialization under scientific management leads to monotony, since the worker is supposed to perform the same job repeatedly; hence, the work becomes dull and monotonous, which will lead to reduced efficiency. Psychologists suggested 'Job Enlargement' where by the workers is allowed to do small bits of work connected with the job proper, in addition to the job itself.

(6) Loss due to re-organization: Introduction of scientific mgt. requires a virtual re-organization of the whole industrial structure and because of the suspended work, there could be loss of production. Hence, scientific mgt. is to be introduced slowly so that the normal functioning of the industry is not distributed.

Activity C:

1. Do you think F.W. Taylor's scientific management is at its verge of obsolescence? justify your answer by stating case for or against it with the help of practical illustration of your choice.

3.6 Summary

Management is all pervasive in nature since it is inevitable irrespetive of nature and size of the activity. It has versatile and unique role to play in business, industry, society and national economy as a whole. Henry Fayol gives six types a qualities that a manager require viz-Physical, Mental, Moral, Educational, Technical and experience. He has also give fourteen principles of management also known has 'Administrative Management'.F.W. Taylor come about how to add an element of science in management, he has given elements and principle of scientific management. Scientific management was criticize for its pessimistic assumption about human nature and problem of monotony. Scientific management laid down mental revolution as a essential condition for its successful application.

3.7 Self Assessment Questions

1 What are the common qualities you expect in a successful manager ?

2 Critically evaluate F.W.Taylor's 'Scientific Management' and state whether and to what extent it can be successful in present context ?

3 Which of Fayol's principles & functions of management do you believe still apply today ?

4 Discuss significance of management with reference to business, industry, society and national economy.

5 Was Taylor's assumption that management and labour had a common cause valid ? why or why not ?

6 What were some of the work methods and tools that Taylor introduced to increase productivity ?

3.8 Reference Books

- L.M. Prasad (2002); 'Principles and Practices of Management'; Sultan Chand & Sons, Educational Publishers, 2002, New Delhi.
- James A. F. Stoner, R. Edward Freeman, and Daniel R. Gilbert Jr. (2008); 'Management'; PEARSON Prentice Hall, 6th Edition, Reprint in 2008.

Unit - 4 Schools of Management Thoughts

Structure of Unit

4.0 Objectives

After completing this unit, you will be able to:

- Learn historical background & evolution of management thoughts.
- Recognize classical, neo-classical contingency approaches to management.
- State characteristics and limitations of different approaches to management.

4.1 Introduction

Study of the field of management and an organization is a study of an organic system. The system, its variables and its dynamics keep on changing with the passage of time. As we put formal attempt to view the situation from management perspectives, probably every time we find its unique interpretation, new experience with related dynamics .In fact this extra ordinary feature which has provoke so many experiments, framing different equation to deal with prevailing situation. With the passage of time management scholars have also found that principles to deal with situation keeps on changing, new perspectives developed over a period of time, and probably their unique tested knowledge in the form of personal opinion prevails as schools of management thoughts. These different views have offered us an opportunity to study, research and practice this organic discipline in a more fertile way.

4.2 Historical Background of Management

Although studying history may not be at the top of your list of exciting things to do, it can help you understand today's management theories and practices and help see what has and has not worked. What is interesting, we think, is that management has been practiced a long time. Organized endeavors directed by people responsible for planning, organizing, leading, and controlling activities have existed for thousand-years. The Egyptian pyramids, the Great Wall of China, the Qutub Minar, and the Taj Mahal, for instance, are tangible evidence that projects of tremendous scope, employing tens of thousands of people, were completed in ancient times. The pyramids are particularly remarkable example. The construction of a single pyramid occupied more than 100,000 workers for 20 years. Who told each worker what to do? Who ensured that there would be enough stones at the site to keep workers busy? The answer is managers. Regardless of what these individuals were called, someone had to plan what was to be done, organize people and materials to do it, lead and direct the workers, and impose some controls to ensure that everything was done as planned. Another example of early management can be seen during the 1400s in the city of Venice, a major economic and trade center. The Venetians developed an early form of business enterprise and engaged in many activities common to today's organizations. For instance, at the arsenal of Venice, warships were floated along the canals, and at each stop, materials and riggings were added to the ship. Doesn't that sound a lot like a car "floating" along an automobile assembly line and components being added to it? In addition, the Venetians used warehouse and inventory systems to keep track of materials, human resource management functions to manage the labor force, and an accounting system to keep track of revenues and costs. Two events are especially significant to management history. First, in 1776, Adam Smith published The Wealth of Nations, in which he argued the economic advantages that organizations and society would gain from the division of labor (or job specialization)— that is, the breakdown of jobs into narrow and repetitive tasks. Using die pin industry as an example, Smith claimed that 10 individuals, each doing a specialized task, could produce about 48,000 pins per day among them. However, if each person worked alone, performing each task separately, it would be quite an accomplishment to produce even 10 pins per day! Smith concluded that division of labor increased productivity by increasing each worker's skill and dexterity, saving time lost in changing tasks, and creat-ing labor-saving inventions and machinery. Job specialization continues to be popular. For example, think of the specialized tasks performed by members of a hospital surgery team, meal preparation tasks done by workers in restaurant kitchens, or positions played by players on a football team. The second important event is the industrial revolution. Starting in the late eighteenth century when machine power was substituted for human power, it became more economical to manufacture goods in factories than at home. These large, efficient factories needed someone to forecast demand, ensure that enough material was on hand to make products, assign tasks to people, direct daily activities, and so forth. That "someone" was managers, and these managers would need formal theories to guide them in running these large organizations. It wasn't until the early 1900s, however, that the first steps were taken toward developing such theories.

4.3 Evolution of Management Thoughts

Management practice is as old as human civilisation when people started living together in groups. For, every human group requires management and the history of human beings is full of organisational activities. However, the study of how managers achieve results is predominantly a twentieth century phenomenon. In the earlier years, management could not get the attention of researchers because the field of business in which the management concepts were applied was held low, unwor-thy of study; indifferent approach of other social scientists like economists, sociolo-gists, psychologists, etc., towards management and business organisations; treatment of management as an art not as a science; and the commonly-held belief that managers are born and not made. These factors created the situation where the need for a systematic study of management was not felt. This situation continued till the beginning of the twentieth century.

The situation started changing with the beginning of the 20th century; specially the World War I created the situation where people started thinking of solution to the problem of how limited resources could be applied in better way. The World War II added further problem to this end. Growing competition and complexity of managing large business organisations further provided impetus to developing sys-tematic management concepts and principles. In recent years, there has been worldwide rivalry for markets, power and progress. The increasingly severe competition has come from such factors as (i) technological innovations and their dissemination in business, (ii) growing technological obsolescence, (iii) increase in capital investment, (iv) freedom at national and international markets, and (v) in-creasing buyers' sovereignty in the markets. Besides the growing competition in business, the complexity of managing business also has increased due to (i) increas-ing size of business organisations, (ii) high degree of division of labour and specialisation, (Hi) increased government regulations and controls to make business more socially-oriented, (iv) organised union activities to put pressures on manage-ment, and (v) pressure of various conflicting interest groups to meet their demands from the organisations. Both these factors-growing competition and complexity in managing business-have demanded the efficiency in management process which can come not merely by trial and error methods but by developing and applying sound management concepts and principles.

These factors emerged gradually which attracted the attention of a wide variety of intellectuals-economists, sociologists, psychologists, anthropologists, mathemati-cians, and management practioners-to study the organisations and processes through which these organisations could be made more effective. Each of these groups of intellectuals viewed the organisations and the processes therein in a particular way and made recommendations accordingly.

This led to the emergence of a variety of orientations and approaches in management; some making clear demarcation from others; some overlapping others. Similarly, a particular approach did not really start with the end of the previous one so far as time period is concerned; there was considerable overlapping of time too, as shown in Table . The periods presented are approximate.

TABLE : Evolution of management thought

	Management thought	**Period**
1.	Early contributions	Upto 19th century
2.	Scientific management	1900-1930
3.	Administrative/operational management	1916-1940
4.	Human relations approach	1930-1950
5.	Social systems approach	1940-1950
6.	Decision theory approach	1945-1965
7.	Management science approach	1950-1960
8.	Human behavior approach	1950-1970
9.	Systems approach	1960s onwards
10.	Contingency approach	1970s onwards

Another classification of management thought and approaches is in the form of classical, neoclassical, and modern. Classical approach includes scientific management and administrative/operational management. Neoclassical approach includes human relations approach and some relevant part of social systems approach, decision the-ory approach, management science approach, and human behaviour approach. Modern approach includes systems approach, contingency approach, and some rele-vant portion of the above approaches not included in neoclassical approach. However, this classification is time-spaafic because what is modern in today's con-text, may not remain the same in future.

4.4 Classical and Neo-Classical Approaches to Management

A relevant analogy is the classic story of the blindfolded men and the elephant, in the which each declares the elephant to be like the part he is feeling : The first man, touching the side, declares that the elephant like a wall; the second touches the trunk and says the elephant is like a snag third feels one of the elephant's tusks and believes the elephant to be like **i** the fourth grabs a leg and says the elephant is like a tree; and the fifth touches the elephant's tail and concludes that the animal is like a rope. Each is encounter same elephant, but what each observes depends on where he stands. Similarly the four approaches contributes to our overall understanding of manage but each is also a limited view of a larger animal.

Classical Approach: Although we've seen how management has been used in organized efforts since e history, the formal study of management didn't begin until early in the twentieuh century. These first studies of management, described as the classical approach, emphasized rationality and making organizations and workers as efficient as possible, major theories comprise the classical approach: scientific management and general administrative management.

Scientific Management: If you had to pinpoint when modern management theory was born, 1911 might be good choice. That was when Frederick Winslow Taylor's Principles of Scientific Management was published. Its contents were widely embraced by managers around the world. The book described the theory of scientific management: the use of scientific methods to define the"one best way" for a job to be done. Let's look more clearly at what Taylor and other scientific management researchers did.

Frederick W. Taylor - Taylor worked at the Midvale and Bethlehem Steel Companies in Pennsylvania. As a mechanical engineer with a Quaker and Puritan background, he was continually appalled by workers' inefficiencies. Employees used vastly different techniques to do the same job. They often "took it easy" on the job, and Taylor believed that worker output was only about one-third of what was possible. Virtually no work stan-dards existed. Workers were placed in jobs with littie or no concern for matching their abilities and aptitudes with the tasks they were required to do. Taylor set out to remedy that by applying the scientific method to shop-floor jobs. He spent more than two decades passionately pursuing the "one best way" for such jobs to be done. Taylor's experiences at Midvale led him to define clear guidelines for improving production efficiency. He argued that these four principles of management would result in prosperity for both workers and managers.4 How did these scientific principles really work? Let's look at an example. Probably the best known example of Taylor's scientific management efforts was die pig iron experiment. Workers loaded "pigs" of iron (each weighing 92 pounds) onto rail cars. Their daily average output was 12.5 tons. However, Taylor believed that by scientifi-cally analyzing the job to determine the "one best way" to load pig iron, output could be increased to 47 or 48 tons per day. After scientifically applying different combinations of procedures, techniques, and tools, Taylor succeeded in getting that level of productivity. How? He put the right person on the job with the correct tools and equipment, had the worker follow his instructions exactly, and motivated the worker with an economic incentive of a significantly higher daily wage. Using similar approaches for other jobs, Taylor was able to define the "one best way" for doing each job. Overall, Taylor achieved consistent productivity improvements in the range of 200 percent or more. Based on his groundbreaking studies of manual work using scientific principles, Taylor became known as the "father" of scientific management. His ideas spread in the United States and to other countries and inspired others to study and develop methods of scientific management. His most prominent followers were Frank and Lillian Gilbreth.

Frank and Lillian Gilbreth - A construction contractor by trade, Frank Gilbreth gave up that career to study scientific management after hearing Taylor speak at a professional meeting.

Frank and his wife, Lillian, a psychologist, studied work to eliminate inefficient hand-and body motions. The Gilbreths also experimented with the design and use of the proper tools and equipment for optimizing work performance. Frank is probably best known for his bricklaying experiments. By carefully analyzing the bricklayer's job, he reduced the number of motions in laying exterior brick from 18 to about 5 and in laying interior brick from 18 to 2. Using Gilbreth's techniques, a bricklayer was more productive and less fatigued at the end of the day.

The Gilbreths were among the first researchers to use motion pictures to study hand-and body motions. They invented a device called a microchronometer that recorded a worker's motions and the amount of time spent doing each motion. Wasted motions missed by the naked eye could be identified and eliminated. Gilbreths also devised a classification scheme to label 17 basic hand motions I search, grasp, hold), which they called therbligs (Gilbreth spelled backward, with the transposed). This scheme gave the Gilbreths a more precise way of analyzing worker's exact hand movements.

How Today's Managers Use Scientific Management. Many of the guidelines and techniques that Taylor and the Gilbreths devised for improving production efficiency are still used in organizations today. When managers analyze the basic work tasks that must be performed, use time-and-motion study to eliminate wasted motions, hire the best-qualified workers for a job, or design incentive systems based on output, using the principles of scientific management.

General Administrative Theory: A-group of writers looked at the subject of management from the perspective of the entire organization. This approach, known as general administrative theory, focused more on what managers do and what constituted good management practice. The two most prominent individuals behind general administrative theory were Heri Fayol and Max Weber.

Henri Fayol - He was the first identified five functions that managers perform: planning, organizing, commanding, coordinatting, and controlling. Because his ideas were important, let's look closer at what he had say. Fayol wrote during the same time period as Taylor. While Taylor was concerned with first line managers and the scientific method, Fayol's attention was directed at the activities of all managers. He wrote from personal experience as he was the managing director of a large French coal-mining firm. Fayol described the practice of management as something distinct from accounting, finance, production, distribution, and other typical business functions that management was an activity common to all business endeavors, govern: even the home led him to develop 14 principles of management—fundamental rules of management that could be applied to all organizational situations and schools.

Max Weber. Max Weber was a German sociologist who studied organizations. Writing in the early 1900s, he developed a theory of authority structures and relations based on an ideal type of organization he called a bureaucracy-a form of organization characterized by division of labor,a clearly defined hierarchy, detailed rules and regulations, and impersonal relationships. Weber recognized that this "ideal bureaucracy" didn't exit in reality.

Employees Work More Efficiently By: When we apply historical study we can conclude that in present context, assigning work that has sufficient challenges.When they encounter barriers, guide and help them without doing their work for them.

Rules for Managers:

- Recognizing and appreciating good performance.
- Setting challenges.
- Planning/executing/monitoring for better results.

Instead, he intended it as a basis for theorizing about how work could be done in large groups. His theory became the structural design for many of today's large organiza Bureaucracy, as described by Weber, is a lot like scientific management in its ideology. Both emphasize rationality, predictability, impersonality, technical competence and authoritarianism. Although Weber's ideas were less practical than Taylor's, the fact that his "ideal type"still describes many contemporary organizations attests to the importance of Weber's ideas.

How Today's Managers Use General Administrative Theories: Several of our current manaagement ideas and practices can be directly traced to the contributions of general administrative theory. For instance, the functional view of the manager's job can be attributed to Fayol. In addition, his 14 principles serve as a frame of reference from which many current management concepts-such as managerial authority, centralized decision making, reporting to only one boss, and so forth-have evolved. Weber's bureaucracy was an attempt to formulate an ideal prototype for organizations. Although many characteristics of Weber's bureaucracy are still evident in large organizations, his model isn't as popular today as it was in the twentieth century. Many managers feel that a bureaucratic structure hinders individual employees' creativity and limits an organization's ability to respond quickly to an increasingly dynamic environment. However, even in flexible organizations of creative professionals-such as Infosys, UTV, Cisco Systems, and Dr Reddy's Lab-some bureaucratic mechanisms are necessary to ensure that resources are used efficiently and effectively.

Activity A:

1. With the help of group efforts try to make effective presentation historical background of management and evolution of management thoughts in you classroom.

4.5 Contingency Approach to Management

Contingency or situational approach is an important addition to the paradigm of modern management theory and approach. In one way, this is an extension of systems approach. The basic idea of contingency approach is that there cannot be a particular management action which will be suitable for all situations. Rather, an impropriate action is one which is designed on the basis of external environment and internal states and needs. Contingency the orists suggest that systems approach does not adequately spell out the precise relationship between organisation and its environment. Contingency approach tries to fill this gap by suggesting what should be done in response to an event in the environment. Some researchers distinguish between contingency and situational approaches by suggesting that situational management implies that what a manager does depends on a given situation. Contingency approach, on the other hand, suggests an active interrelationship between the variables in a situation and the managerial actions devised. Thus, contingency approach takes into account not only given situations but also the influence of given solutions on behaviour patterns of an organisation. Despite these differences and emphasis on varying factors, themes of roth the approaches are common. In fact, some authors believe that the term contingency is misleading and they should have used the term situational. Nevertheless, both terms are used interchangeably. The basic theme of contingency view can be presented by quoting Tosi and Hammer. They say that:"When a subsystem in an organisation behaves in response to another system or subsystem, we say that response is contingent on environment. Hence, a contingency approach is an approach where the behaviour of one subunit is dependent on its environmental relationship to other units or subunits that have control over the consequences desired by that subunit." Judged in the light of this statement, contingency approach has the following features :

1. Management action is contingent on certain action outside the system or sub-system as the case may be.

2. Organisational action should be based on the behaviour of action outside the system so that organisation should be integrated with the environment.
3. Because of the specific organisation-environment relationship, no action can be universal. It varies from situation to situation.

4.6 Management Thinkers and Their Contributions

Name	Chief Publication	Major Contributions
Henri Fayol	Administration Industrielle et Generale (1916).	Stressed that the theory of administration was equally applicable to all forms of organized human cooperation.
Harrington (1853-1931)	1. Efficiency as Basic for Operation and Wages (1900). 2. The Twelve Principles of Efficiency (1912). 3. The Scientific Selection of Employees (1913).	Studied the Sante Fe Rail-road and promoted "scientific management" in general usage.
Fredrick W. Taylor (1856-1915)	1. A Piece-Rate System (1895). 2. Shop Management (1903). 3. On the Art of Cutting Metals (1906) 4. The Principles of Scientific Management (1911).	Father of scientific management. Developed high-speed cutting tools. Introduced time study to industry.
Karl Pearson (1857-1936)	1. On the Correlation of Fertility with Social Value (1913). 2. Tables for Statisticians (1933).	Developed basic statistical tables and statistic technicques, including the chi-square test and the standard deviation concept.
Henry L.Gantt (1861-1919)	1. Work, Wages and Profits (1910). 2. Industrial Leadership (1916). 3. Industrial Leadership (1916). 4. Organizing for work (1919).	Emphasized relation of management and labour. Stressed conditions that have favourable psychological effects on the worker. Developed charting techniques for scheduling.
Max Weber (1864-1920)	1. The Theory of Social and Economic Organisation (translated by Henderson and Parsons in 1947). 2. From Max Weber : Essays in Sociology (translated by Gerth and Mills in 1946).	The foremost pioneer in the development of a theory of bureaucracy.
Frank Gilbreth (1865-1920)	1. Concrete Systems (1908). 2. Motion Study (1911).	Searched for "the one best way". Introduced motion study to industry.
Mary Parker Follent	Dynamis Administration (edited by Metcalf and Urwich, 1941).	Led in practical observations about the value of human relations to the basic principles of organization.

G. Elton Mayo (1880-1949)	1. The Human Problems of an Industrial Civilization (1933). 2. The Social Problems of an Industrial Civilization (1933).	Stressed the importance of human and social factors in industrial relationships. Questioned the overemphasis on technical skills at the expense of adaptive social skills. Led a team of reserachers in extensive studies at the Hawthorne plan of Western Electric Company.
Chester I. Barnard (1886-1961)	1. The Functions of the Executive (1938). 2. Organization and Manageent (1948).	Leader in stressing sociological aspects of management. Concentrated on the concept of authority, the importance of communi-ation, and informal organizations in man-agement.
Kurt Lewin (1890-1947)	Resolving Social Conflicts Field Theory in Social Science (1951).	Developed the theory of group dynamics.
Ronald A. Fischer (1890-1962)	1. Statistical Methods for Research Workers (1925). 2. The Design of Experiments (1935).	Pioneer in the use of statistical methods in research. Made valuable contribuetions to the design of experiments.
Walter A. (1891-1972)	The Economic Quality Control of Manufactured Products (1930).	Applied theory of probability and statistical inference to economic problems at Bell Laboratories. Developed statistical control charts.
F.J.Roethlisberger (1898-1974) Name	1. Management and the Worker (with W.J. Dickson, 1939). 2. Management and Moral (1941). 3. A New Look for Manageent (1948).	Made a comprehensive report on the Hawthorne experiment. Led in experimental research on human factors in management.
Peter Drucker (1909-)	1. The Practice of Management (1954). (And several other books on management).	Developed concepts of management by objectives. As a consultant and writer, popularized new developments in management.
G.B. Dantzig (1914-)	Maximization of a Linear Function of Variables Subjects to Linear Inequalities (1947).	Developed the basis for practical applications of linear programming.
Claude Shannon	The Mathematical Theory of Com munication (1948).	Laid the theoretical foundation for information theory.
Herbert A. Simon (1916 -)	1. Administrative Behavior (1947). 2. Models of Man (1957). 3. Organization (1958).	Winner of Noble Prize in Economics. Developed theory building from behavioural and quantitative bases for modern management.

4.7 Characteristics and Limitations of Approaches to Management

Characteristics/Contributions	Limitations
Empirical, or Case Approach Studies experience through cases Indentifies successes and failure.	Situations are all different. No attempt to identify principles. Limited value for developing management theory.
Interpersonal Behaviour Approach Focus on interpersonal behaviour, human relations, leadership, and motivation, based on individual psychology.	Ignores planning, organizing, and controlling. Psychological training is not enough to become an effective manager.
Group Behaviour Approach Emphasis on behaviour of people in groups. Based on sociology and social psychology. Primarily study of group behaviour patterns. The study of large groups is often called "organization behaviour".	Often not integrated with management concepts, principles, theory, and techniques. Need for closer integration with organization structure design, staffing, planning and controlling.
Cooperative Social Systems Approach Concerned with both interpersonal and group behavioural aspects leading to a system of cooperation. Expanded concept includes any cooperative group with a clear purpose.	Too broad a field for the study of management. At the same time, it over-looks many managerial concepts, principles and techniques.
Socio-Technical Systems Approach Technical system has great effect on social system (personal attitudes, group behaviour). Focus on production, office operations and other areas with close relationship between the technical system and people.	Emphasis only on blue-collar and lower-level office work. Ignores much of other managerial knowledge.
Decision Theory Approach Focus on the making of decisions, persons or groups making decisions, and the decision-making process. Some making as a springboard to study all enterprise activities. The boundaries of study are no longer clearly defined.	There is more to managing than making decisions. The focus is at the same time too narrow and too wide.
Systems Approach Systems concepts have broad applicability. Systems have boundaries, but they also interact with the external environment, i.e. organizations are open systems. Recognizes importance of study inter-relatedness of planning, organizing, and controlling in an organization as well as many subsystems.	Analyses of the interrelatedness of systems and subsystems as well as the interactions of organizations with their external environment. Can hardly be considered a new approach to management.
Mathematical or "Management Science" Approach Managing is seen as mathematical processes, concepts, symbols, and models. Looks at management as a purely logical process, expressed in mathematical symbols and relationships.	Preoccupation with mathematical models. Many aspects in managing cannot be modelled. Mathematics is a useful tool, but hardly a school or an approach to management.

Contingency or Situational Approach Managerial practice depends on circumstances (i.e. a contingency or a situation). Contingency theory recognizes the influence of given solutions on organizational behaviour patterns.	Managers have long realized that ther is no one best way to do things. Difficulty in determining all relevant contingency factors and showing their relationships : Can be very complex.
Managerial Roles Approach Original study consisted of observations of five chief executives. On the basis of this study, 10 managerial roles were identified and grouped into (a) interpersonal, (b) informational, and (c) decision roles.	Original sample was very small. Some activities are not managerial- activities are evidence of planning, organizing, staffing, leading and control-ling. But some important managerial activities were left out (e.g. appraising managers).
McKinsey's 7-S Framework The seven S's are (a) strategy (b) structure (c) systems (d) style (e) staff (f) shared values (g) skills.	Although this experienced consulting firm now consulting firm now uses a framework similar to the one found useful by Kootz et al. since 1955 and confirms its practically, the terms used are not precise and topics are not discussed in depth.
Operational Approach Draws together concepts, principles, techniques, knowledge from other fields, and managerial approaches. The attempt is to develop science and theory with practical application. Distinguishes between managerial and non-managerial knowledge. Develops classification system built around the managerial functions of planning, organizing, staffing, leading and controlling.	Does not, as some authors do, identify "representing" or "coordination" as a separate function. Coordination, for example, is the essence of managership and is the purpose of managing.

Activity B:

1. Make a suggestive not on what should-today's entrepreneurs know about management.

4.8 Summary

Well known schools of management thaught - Classical Neo-Classical and Contingency approach- have contributed to managers understanding of organisations and to their ability to manage them. Each offers a different perspective for defining management problems and opportunities and for developing ways to deal with them. In their current state of evolution, however, each approache also overlooks or deals inadequately with important if organisational life. The newer system approach, based on general system theory and the contingency approach have already been developed to the point where they offer valuable insight for the practicing manager. Eventually they may lead to the integration of the approach yet not perceived on the horizon may accomplish this end.

4.9 Self Assessment Questions

1 Why it is important for you to understand the various management theories that have developed?

2 What are the major contribution and limitation of the classical approach?

3 Which approach or school of management thought makes the most sence to you? Why?

4 Discuss in detail system approach to management?

5 What is the major task of the manager according to the contingency approach?

4.10 Reference Books

- L.M. Prasad (2002); 'Principles and Practices of Management'; Sultan Chand & Sons, Educational Publishers, 2002, New Delhi.
- James A. F. Stoner, R. Edward Freeman, and Daniel R. Gilbert Jr. (2008); 'Management'; - PEARSON Prentice Hall, 6th Edition, Reprint in 2008.
- P.C. Tripathi, and P. N. Reddy (2008); 'Principles of Management'; Tata McGraw-Hill Publishing Company Limited, 4th Edition, 2008, New Delhi.
- Harold Koontz and Heinz Weihrich (2003); 'Essentials of Management'; Tata McGraw-Hill Publishing Company Limited, Reprint 2003, New delhi.
- V.S.P. Rao and V. Hari Krishna (2009); 'Management-Text and Cases'; Excel Books, 1st Edition, Reprint 2009, New Delhi.
- Stephen P. Robbins, mary Coulter, and Neharika Vohra (2010); ' Management' PEARSON, Prentice Hall, 10th Edition, 2010.
- Y. K. Bhushan (2008); 'Fundamentals of business Organization and Management'; Sultan Chand & Sons, Reprint 2008, New Delhi.
- Prof. S. A. Sherlekar and Dr. Virendra Sharad Sherlekar (2000); ' Modern Business Organisation and management'; Himalaya Publishing House, 5th Edition, Reprint 2000.

Unit - 5 Planning

Structure of Unit

5.0 Objectives

After completing this unit, you will be able to:

- Discuss the basic frame work of planning function as an element of managing.
- Understand different types of planning approaches.
- State the major principles involved in planning
- Identify the limitations to effective planning.

5.1 Introduction

Management is concerned with present and future implications of his decisions. Predicting the future is one of management's greatest challenges. According to John McHale, "The future of the future is in the present."' The survival and progress of a concern is largely determined by decisions made today. No organization can avoid change, so all managers must plan effectively. Planning, organizing, directing, and controlling are the primary functions of management. But "planning precedes all other functions." McFarland writes that "Planning is both an organizational necessity and a managerial responsibility."

1. Meaning of Planning : The meaning of the word' 'planning is something of a paradox'. To some' it is an omnibus term having convenient utility and a generalized context extending from broad philosophical considerations to precise details. They think of it as specific activity; in contrast, some believe it is a part of, perhaps even a symbol for almost everything one does. Then, too, an upsurge in planning has created many different kinds of planning, and this array of different entities, all identified by planning has added to confusion. There are some who consider planning synonymous with decision-making. This is also erroneous. Decision-making is not the same as planning because, one can make decisions in other activities also, though the role of decision-making is highly important in planning

Planning is deciding in advance about a future course of action- It is deciding what needs to be done, when and how it needs to be done, and who is to do it. It is the process through which managers determine goals and devise ways of accomplishing them. It is concerned with ends (what is to be done) as well as means (how it is to be done). It involves selecting missions and objectives and the actions to achieve them. It bridges the gap from where we are to where we want to go.

It requires anticipating future and decision- making that is, choosing from among alternative future courses of action. It provides the blueprints of actions to achieve goals.

2. **Definitions of Planning :** In the words of Koontz and O'Donnell, "planning is an intellectually demanding process; it requires the conscious determination of courses of action and the basing of decisions on purpose, knowledge and considered estimates.

In the words of Tansik and Chase, "Planning is the process of setting a course of action designed to accomplish given goals in a predicted environment.

According to Andrew Szilagyi, "Planning is an ability to visualize a future process and its results.

In the words of C.L. Hudson "To plan is to produce a scheme for future actions to bring about specific results, at specified period of time. It is a deliberate attempt to influence, exploit, bring about and control the nature, direction, extent, speed, and effects of change.

George R. Terry writes, "Planning is the selecting and relating of cats and the making and using of assumptions regarding the future in the visualization and formulation of proposed activities believed necessary to achieve desired results.

Peter Drucker defines planning as the process of making present entrepreneurial decisions systematically and with best possible knowledge of their futurity.

Thus, planning is an intellectual process of making decisions towards a course of action for the future. It is anticipating the future and determining in advance a line of action to achieve better results. It is deciding in the present what has to be done in future. It is development of policies and Programme by which certain results are to be achieved. Planning process involves establishing objectives. Policies, procedures, methods, and rules. It is a process of making assumptions about the future and gathering facts in order to achieve objectives.

3. **Plan versus planning :** A distinction is often drawn between plans and planning. In brief, plans are result of the planning process. A plan is just a Programme of action regarding the future. It is a statement of objectives to be attained in the future and an outline of the steps necessary to reach them. Planning is the process through which a plan is carried out in practice. W. Haynes makes it clear in this way, "Plans are simply statements of the things to be done. But planning involves (i) deciding on objectives (ii) determining and allocating the resources required and (iv) ensuring that plans are communicated to all concerned.

Plan is a theoretical concept but planning has a practical value. Plans are natural outgrowths of the planning process.

5.2 Characteristics of Planning

On the basis of various definitions, the following characteristics of planning can be pointed out:

1. **Primary task of management :** Planning is the first fundamental function of management. It must occur before any of the other managerial functions. Without planning, the other functions – organizing, direction, controlling etc. Cannot be executed effectively. James Lundi writes, "As a preliminary activity, planning results in the development of a framework within which coordinating, motivating and controlling can be undertaken. "
2. **Intellectual process :** Planning is a process of orderly thinking. While planning, managers have to think about future, as well as about organizational strengths and weaknesses. It requires an ability to visualize the future. It involves processes of perception, analysis and thought.

3. **Future-oriented :** It is a process of looking ahead. Earl Strong says," Planning is anticipating." Hamilton Church writes, "Planning is, in essence, the exercise of foresight." It is looking into the future before the situation actually occurs.

4. **Decision-oriented :** The planning process involves decision-making that specifies actions necessary to achieve future goals. Billy E. Goetz writes, "Planning is essentially choosing and a planning problem arises when an alternative course is discovered."

5. **Goal-oriented :** Planning is focused on those efforts necessary to achieve future end-states. It is associated with the goals of the organisation. Koontz and Weihrich writes, "Plans provided a rational approach to preselected objectives."

6. **Forecasting is the essence of planning :** Planning has the central concern with the future. Fayol says, "It is assessing the future and making provision for it. " Ackoff writes, "Planning is anticipatory decision-making. "It is evaluation and analysis of future in advance. But, Fulmer says. 'Planning is more than forecasting. "It is the means of bridging the gap to the future.

7. **Pervasive function :** Planning is a function of every manager, although the character and type of planning may vary with his formal power. It is applicable at every level of managerial hierarchy. Knootz and Donnell writes, "All managers- from presidents to foremen – plan. And planning must filter through the

8. **Planning and action are twins of management :** Knootz and Donnel writes, "Plans alone cannot make an enterprise successful. Action is required, the enterprise must operate. Plans must focus on action. Without plans, action must become merely random activity producing nothing but chaos." The alternative to a plan is disorder.

9. **Planning is wider than decision-making :** Planning and decision making are not the same. Decision can be made without planning, but planning cannot exist without decision-making. Even then, planning is more than decision making. It involves choosing an objective, charting a course, and moving along that course to achieve that objective. E.W.Reilley writes," Planning has to be a searching look within, a broad look around, and a long look ahead."

10. **Inter-dependent activity :** Planning co-ordinates the activities of various departments, sections and sub-sections. Departmental plans will be the components parts of master Plan prepared at the top of the organisation.

11. **Continuous and dynamic activity :** Planning is a never-ending activity. Planning cycle goes on continuously. It involves constant review and change. To be successful, planning has to adjust with the changes taking place in the environment. Planning prepares for adaptive and innovative change.

12. **Planning is the basis of control :** Knootz and O'Dennell writes," Plans furnish the standards of control. Unplanned action cannot be controlled. Any attempt to control without plans would be meaningless, since there is no way for people to tell whether they are going where they want to go (the task of control) unless they first know where they want to go (the task of planning)."

13. **Other features**
    - (i) Planning follows a systematic and routinized procedure.
    - (ii) It is participative in nature.
    - (iii) Planning always has a dimension of time.
    - (iv) It provides purpose and direction for the members of an organisation.
    - (v) G.A. Steiner says "Planning is a philosophy as an attitude and a way of life."
    - (vi) Planning also implies "managerial innovation" (Knootz and Weihrich).

5.3 Nature of Planning

The basic nature of planning may be understood in terms of it being a rational approach, open-system approach, and its pervasiveness.

1. **Planning: A Rational Approach :** The concept of rationality denotes the choice of appropriate means for achieving stated objectives. In organizational context, planning as a rational tries to fill the gap between actual status (current performance) and desired status (desired performance). The difference between two time periods may vary between short terms, say one year or so and long term, and say 5 years or so or even more depending on the degree of futurity which an organisation takes into account for charting out its plan. The current and desired status usually expressed in terms of objective can be achieved by an action or set of actions. For completing an action, various types of resources-human as well as non-human-are required. The rational approach of planning emphasizes the most appropriate use of these resources.
2. **Planning: An Open System Approach :** Planning adopts an open system approach. It takes inputs from the environment, processes these, and exports outputs to environment. The open system approach of planning indicates that the identification of gap between current status and desired status in future and the action required to bridge this gap is influenced by a variety of environmental factors-economic, political-legal, technological, socio-cultural and competitive. These factors are dynamic and change with the time. Therefore, while adopting open system approach in planning, managers have to take into accounts the dynamic features of the environment.
3. **Pervasiveness of Planning :** Planning is pervasive and extends throughout the organisation. Every manager has a planning function to perform. This stem from the fact that he is a manager and that planning is a fundamental management function. However, the pervasiveness of planning is commonly overlooked and planning is frequently considered as being the function of top level managers. While it is true that they devote more of their time to planning and works with more vital issue then the managers of the middle and lower levels do, the fact remains that every managers has to perform planning within his particular area of activities. Top management is responsible for overall objectives and actions of the organisations. Therefore, it must plan what this objective should be and how this can be achieved. Similarly, a departmental head has to devise the objectives of his department within the organizational objectives and also the method of achieving these; a foreman has to devise the objectives of his shop and also how to achieve these. For example, budget, a part of plan n any organization, is prepared at various levels.

Each level contributes to the preparation of budget by contributing what his efforts will contribute in terms of results. Like all the levels of management, planning exists in all the organisations regardless of its size or nature of activities, In large organisations, its presence is apparent due to some employees giving all or major portion of their time to planning efforts. For example, many large organisations have established separate corporate planning departments. Usually in these cases, emphasis is given to things as the allocation of available resources in the best manner to achieve basic goals and the courses of action for certain problems deemed most expeditious at the times and places. In small organizations, planning is commonly of a somewhat informal type. The owner/manager himself may do most of it. Relatively it's easy to plan for small organisation because the objectives of such an organisation are simple; there are few people to deal with and the planning work itself is free intricacy. Thus, planning is equally essential for the small and large organizations.

Activity A:

1 Take any organization like college, school, work place etc. and analyze the implications of three approaches of planning.

5.4 Types of Planning

Types of Planning

There may be several ways in which an organization can undertake planning process though the basic steps involved remain the same in each way. Planning can be differentiated on the basis of coverage of organizational activities importance of contents in planning process, time dimension in planning, approach adopted in planning, and degree of formalization in planning process, as shown in table.

Table 5.1: Types of Planning

	Dimensions	**Types of planning**
1.	Coverage of activities	Corporate and functional planning
2.	Importance of contents	Strategic and tactical / operational planning
3.	Time period involved	Long term and short term planning
4.	Approach adopted	Proactive and reactive planning
5.	Degree of formalization	Formal and informal planning

The above classification is not mutually exclusive but iterative. For example, strategic and tactical planning may be undertaken on the basis of proactive or reactive approach, or formal or informal basis. However, in each set of classification, the type of emphasis put in planning process differs.

1. Corporate and Functional Planning : We have seen earlier that planning activity is pervasive and can be undertaken at various levels of an organization. It may be for the organization as a whole or for its different functions. Thus, based on the coverage of activities, there may be planning for the organization as a whole, known as corporate planning or for its different functions, known as functional planning.

- Corporate Planning : The term corporate planning denotes planning activities at the top level, also known as corporate level, which cover the entire organizational activities. The basic focus of corporate planning is to determine the long term objectives of the organization as a whole and then to generate plans to achieve these objectives bearing in mind the probable changes in environment. Because of long term orientation involved and strategic aspects covered in corporate planning, it is also used as synonymous to long term planning or strategic planning. However, some distinction exists among these at least at the conceptual level. Similarly some authors use corporate planning as the total process of management. For example David Hussy has defined corporate planning as follows:

Corporate planning includes the setting of objectives, organizing the work, people, and systems to enable those objectives to be attained, motivating through the planning process and through the plans, measuring performance and so controlling progress of the plan and developing people through better decision making, clearer objectives, more involvement, and awareness of progress.

This definition of corporate planning is quite broad and may cover many management functions not necessarily related to planning aspect of management functions. For example, planning sets future course of action and its implementation is not strictly the planning should be taken as the total planning activities in the organization and not the total management functions.

Similarly corporate planning is used as long range planning because long range planning emphasizes the future orientation of the process. However, there is growing opinion which disfavors the use of long range planning as synonymous with corporate planning because it underemphasizes the comprehensive nature of corporate planning. The process of corporate planning is concerned with all aspects and not only the long range. Although the future orientation is certainly the most important argument in favor of the process, long range planning without the back up of short range planning will fail. Differences between corporate planning and long range planning can be understood by classifying the more comprehensive corporate planning further into segments. Normally, corporate planning is divided into strategic planning or long range planning and operational, tactical or short range planning.

- Functional planning : As against corporate planning which is integrative functional planning is segmental, and it is undertaken for each major function of the organization like production / operation, marketing, finance human resource / personnel etc. At the second level, example, marketing planning is undertaken at the level of marketing department and to put marketing plan in action, planning at sub functions of marketing like sales, sale promotion, marketing research etc. is undertaken. A basic feature of functional planning is that it is derived out of corporate planning and, therefore it should contribute to the latter. This contribution is achieved by integrating and coordinating functional planning with corporate planning.

2. Strategic and Operational Planning : Comprehensive corporate planning may be divided into strategic and operational depending on the direction of actions set in the organization. One part of the planning sets future direction of the organization and another part confines itself to devise actions to proceed in that direction. The former is known as strategic planning while latter is known as operational or tactical planning.

- Strategic Planning : Strategic planning sets the long term direction of the organization in which it wants to proceed in future. Anthony has defined strategic planning as follows:

"Strategic planning is the process of deciding on objectives of the organization, on changes on these objectives, on the resources used to attain these objectives and on the policies that are to govern the acquisition, use and disposition of these resources.

Examples of strategic planning in an organization may be planned growth rate in sales, diversification of business into new lines, type of products to be offered, and so on. This way, strategic planning encompasses all the functional areas of business and is affected within the existing and long term framework of economic political technological and social factors. Strategic planning also involves the analysis of various environmental factors particularly with respect to how organization related to its environment.

A basic problem in strategic planning is the period for which plan is to be formulated. Normally more than one year period is considered to be a long one. Usually for most of the organizations, of ranges between 3 and 5 years. However there should be some logic in selecting the right time range for planning. In general since planning and forecasting that underlies it are costly and organization should not plan for a longer period than is economically justifiable, yet it is risky to plan for a shorter period. The choice of period lies in the commitment principle which suggests that logical planning encompasses a period of time in the future necessary to foresee, as well as possible, the fulfillment of commitments involved in decision made today. What the commitment principle implies is that long range planning is not really planning for future decisions but rather planning for the future impact of today's decisions. In other words, a decision is commitment, normally of funds direction of action or other similar things. Therefore, the most striking application of planning period would be the setting up of time period long enough to anticipated the recovery of costs sunk in a course of action.

- **Operational planning :** Operational planning also known as tactical or short term planning, usually cover one year or so. It is aimed at sustaining the organization in its production ad distribution of current products or services to the existing markets. Operation planning can be defined as follows:

"Operational planning is the process of deciding the most effective use of the resources already allocated and to develop a control mechanism to assure effective implementation of the actions so that organization objectives are achieved. Operational planning taken in this way answers the questions about a particular function as follows

1. Why is the action required?
2. What action is to be taken?
3. What will the action accomplish?
4. What are the results of the action required
5. What objectives and conditions must be met?

Operational planning is undertaken out of the strategic planning. The various examples of operational planning may be adjustment of production within giving capacity, increasing the efficiency of operating activities through analyzing past performance, budgeting future costs, programming the comprehensive and special details of future short term operations, and so on.

Difference between strategic and operational planning : Apart from the period of time involved in strategic and operational planning, there are certain differences between the two. The major differences between the two be identified as follows

1. **Range of Choice:** Strategic planning guides the choice among the broad directions in which the organization seeks to move and concerns the general plan allocation of its managerial, financial, and physical resources over future specified period of time. Operational planning, on the other hand, focuses on the ways and means in which each of the individual functions may be programmed so that progress may be made towards the attainment of organizational objectives. Usually operational planning aims at contributing to strategic planning as the former tries to achieve results and actions suggested by the latter.
2. **Type of Environment:** The type of environment for two types of planning is different. Strategic planning takes into account the external environment and tries to relate the organization with it. It usually encompasses all the functional areas of the organization and is affected within the existing and long term future characteristics of various environmental factors. The nature of external environment, thus, is of prime concern of strategic planners. Operational planning mostly focuses on internal organizational environment so as to make the effective use of given resources.
3. **Primacy:** Strategic planning precedes operational planning since the latter is primarily concerned with the implementation of the former. Strategic planning sets trends and direction for managerial actions, its time horizon is usually quite long. Operational planning is heavily concerned with short term Programme implementing step by step progress towards basic organizational goals. In the short term, managers have to work within the framework of given resources as the functional capabilities of the organization are generally restricted because in the short term there cannot be fundamental change in these. Therefore, strategic planning must recognize the limits of what operational planning can realistically be undertaken in given time periods.

Level of formulation: Strategic planning is formulated usually by top level management and other specified planning staff in the organization. At this level, managers can take overall view of the organization and is generally performed by operating managers with the help of the subordinate staff. Since two planning groups are widely separated in the organization, some incompatibility may exist between two types of planning. Therefore, there is a need for integrating these two in order to have better planning effects. If planning is taken as an integrated system, most of the problems of conflict between strategic and operational planning may be overcome.

3. **Long Term and Short Term Planning :** Planning is concerned with problems of future. Thus, a planning system must involve different degrees of futurity. Some parts of the organization have requirements that entail planning for many years into the future, while others require planning over only a short horizon. Capital expenditure, for example is more subject to long range planning than any other area. Such plans frequently form the basis of other planning. The planning period is divided generally into (i) short term and (ii) long term. However, the time dimension of planning is not so obvious as it might appear. Many complex factors interact to determine planning period the industry peculiarities, the market demand, the availability of resources, the lead time involved in the product life cycle, etc. Thus, what might be a long period of planning for one organization might be a short period for others.

What should be an ideal planning period depends upon commitment principles. Commitment principle implies that long range planning is not really planning for future decision but rather planning the future impact of today's decisions. In other words, a decision is a commitment, normally of funds, direction of action, or reputation. Thus, the commitment for different parts of organization differs. Costs incurred on purchasing a machine may be recouped in ten years and management must foresee the situation for the coming ten years. Similarly, a small manufacturer of spare parts who completes his production cycle consisting of raw material acquisition, production, inventory, sales and collection of money, in six months or so requires a commitment period of six months only and the planning period covers only this period.

- **Long term planning :** Long term planning is of strategic nature and involves more than one year period extending to twenty years or so. However the more common long term period is 3 to 5 years. The long term plans usually encompass all the functional areas of the business and are affected within the existing and long term framework of economic, social and technological factors. Long term plans also involve the analysis of environmental factors, particularly with respect to how the organization relates to its competition and environmental factors, particularly with respect to how the organization relates to its competition and environment. Sometimes basic changes in organization structure and activities becomes the real output of such plans. Examples of such changes may be new product, product diversification, individuals in the organization, development of new markets etc.

A distinction between short range and long range planning is often made on the basis of the period of time involved. Though there is a clear correlation between these kinds of planning and the length of time horizons the more important distinction is on the basis of the nature of planning.

- **Short term planning :** Short term planning also known as operational or tactical planning, usually covers one year. These are aimed at sustaining organization in its production and distribution of current products or services to the existing markets these plans directly affect functional groups – production, marketing, finance etc. within its time dimension they answer pertinent questions about a particular function as follows.

1. Why is the action required
2. What action is to be taken

3. What will the action accomplish
4. What are the results of the action required
5. What objectives and conditions must be met

Coordination of Short Term and Long Term Planning. In fact, in a successful planning process, short term plans are made with reference to long term plans because short term plans contribute to long term plans. As such there is a need for coordination between these two plans. The managers should consider, while preparing the short term plans that they are contributing to the long term plans. For this purposes they should scrutinize the former in the light term plans. for this purpose they should scrutinize the former in the light of the latter and subordinates should also scrutinize the former in the light of the latter and subordinates should be made aware of this fact. Sometimes, the short term plans do not contribute to long term plans, but contribute to the organizational objectives. In such a case, the long term plans need to be modified. This can be done when there is flexibility in planning.

4. **Proactive and Reactive Planning :** Classification of planning into proactive and reactive is based on the organization's response to environmental dynamics. We have seen earlier that planning is an open system approach and is affected by environmental factors which keep on changing continuously. However, organizations response to these changes differs. Based on these responses, planning may be either proactive or reactive.

- **Proactive planning :** Proactive planning involves designing suitable courses of action in anticipation of likely changes in the relevant environment. Organizations that use proactive planning use broad planning approaches, broad environmental scanning, decentralized control, and reserve some resources to be utilized for their future use. These organizations do not wait for environment to change but take actions in advance of environmental change. Most of the successful organizations, generally, adopt proactive approach in planning. In India, companies like Reliance Industries, Hindustan Lever, etc, have adopted this approach and their growth rate has been much faster than others.

- **Reactive Planning** : In reactive planning, organizations responses come after the environmental changes have taken place. After the changes take place, these organizations start planning. In such a situations the organizations lose opportunities to those organizations which adopt proactive approach because, by the time, reactors are ready with their plans, the contextual variables of planning show further changes. Therefore, their plans do not remain valid in the changed situations.

This approach of planning is useful in an environment which is fairly stable over a long period of time.

5. **Formal and Informal Planning :** Classification of planning as formal and informal process is based on the degree of formalization which is used in undertaking planning activities.

- **Formal planning** : Formal planning is in the form of well structured process involving different steps. Generally, large organizations undertake planning in formal way in which they create separate corporate planning cell placed at sufficiently high level in the organization. Generally, such cells are staffed by people with different backgrounds like engineers, statisticians, MBAs economists etc. depending on the nature of organization's business. These cells monitor the external environment on continuous basis. When any event in the environment shows some change, the cells for the detailed study of the impact of the event and suggest suitable measures to take the detailed study of the impact of the event and suggest suitable measures to take the advantage of the changing environment. The planning process that is adopted is rational', systematic, well documented and regular.

- **Informal Planning :** As against formal planning, informal planning is undertaken, generally, by smaller organizations. The planning process is based on manager's memory of events, intuitions and gut feelings rather than based on systematic evaluation of environmental happenings. Usually, the corporate planning affairs are not entrusted to any single cell or department but become the part of manager's regular activities. Since the environment for smaller organizations is not complex, they do reasonably well with informal planning process.

Activity B :

1 In the upbringing of a child, parents perform various activities which are in fact short-term and long-term planning activities. Identify and enlist some short-term and long-term planning activities.

5.5 Principles of Planning

As a primary function of management, planning requires some systematic principles. The well known writers Koontz and O'Donnell have formulated certain fundamental principles of planning for the benefit of the managers. These are discussed as under:

1. **Principle of contribution to objectives:** The plans would focus on desired goals. Every plan and all derivative plans must contribute to the achievement of group objectives.
2. **Principle of efficiency:** A plan is efficient if it brings minimum of economic and social costs. Its results must be greater than its unsought consequences.
3. **Principle of primacy of planning:** This principle emphasizes that a manager can hardly undertake organizing, staffing, directing, or controlling without plans to guide him. Hence, planning must precede the execution of all other managerial functions.
4. **Principle of planning premises.** For coordinated planning, it must be formulated on the basis of market forecasts, proper data, existing company policies and plans and anticipated internal environment.
5. **Principle of timing:** Timing is an important attribute of any plan. Timing must be adhered to in the execution of plans. Plans should be timed with the supporting Programme.
6. **Principle of commitment:** The planning period should be justifiable to fulfill the promises and commitments made by the manager. Koontz and O'Donnell write, "Long range planning is not really planning for future decisions but rather planning the future impact of today's decisions."
7. **Principle of flexibility:** The ideal planning is to be flexible. This principle applies to the building into plans, "an ability to change direction" so as to minimize the losses from unexpected events. The plans must have built in flexibility. Koontz and O'Donnell write, "The ability to change a plan without undue cost or friction, to detour, to keep moving towards a goal despite changes in environment has great value."
8. **Principle of navigational change:** The principle of planning indicates that a manager, like the navigator, must continually check his course and redraw plans to meet a desired goal. According to Koontz and O'Donnell, "the manager manages the plan; he is not managed by it."

Activity C:

1. While planning for a college picnic, check the applicability of various principles of planning required to be taken care of.

5.6 Limitations of Planning

Planning as a management function is essential for every manager and every organization, but there are some practical problems in proper planning. The reasons why people tend to fail in planning emphasizes that the practical difficulties encountered in planning disclose that effective planning is not easy. Managers can do better if they are aware of these limitations so that they can take adequate precautions against them. Below are the major limitations to effective planning.

1. **Difficulty of accurate premising :** Planning exercise is undertaken under certain assumptions of future events which are determined by large number of factors in the environment. Thus a limiting factor in planning is the difficulty of formulating accurate premises. Since the future cannot be known with accuracy, premising is subject to a margin of error. Though this margin of error can be minimized by making suitable forecast of future events, perfection cannot be expected. It is often suggested that since long-range planning requires peeping into the distant future and the distant future is not certain, it is useless to undertake long-range planning. In fact this is true to some extent and specially under two situations long-range planning cannot be undertaken: first in the formative stage of the organization's development when it may not be possible to take up long-range planning; second, when the environment in which the organization operates in usable and uncertain owing to social, technological and other changes.

2. **Problems of Rapid change :** Another problem which is related to the external environment is the rapid change which takes place in the environment. In a complex and rapidly changing environment, complications that make planning extremely difficult often magnify the succession of new problems. The problem of Change is more complex in long-range planning than in short-range planning. Present conditions tend to weigh heavily in planning and by overshadowing future needs may sometimes result in error of judgment in rapidly changing conditions, planning activities taken in one period may not be relevant for another period because, the conditions in two periods are quite different.

3. **Internal Inflexibilities :** Managers while going through the planning process have to work in a set of given variables. These variables often provide less flexibility in planning which is needed to cope up with the changes in future events. Such inflexibilities may be either internal to the organization or may lie outside. The major internal inflexibilities are: psychological, policy and procedures, and capital investment.

- **Psychological inflexibilities:** Psychological inflexibility is in the form of resistant to change. Managers and employees in the organization may develop patterns of thought and behavior that are hard to change. They look more in terms of present rather than future. For them, planning tends to accelerate change and unrest. Thus this approach works against planning because planning often depends on changes. Therefore managers instituting a new plan are often frustrated solely by the unwillingness of people to accept change.

- **Policy and procedural Inflexibility**: Another internal inflexibility emerges because of organization's policies and procedures. Once these are established they are difficult to change. Thought these policies, procedures and rules are meant to facilitate managerial actions by providing guidelines, they often tend to be too exacting and too numerous that they leave very little scope for managerial initiative and flexibility. Since managers have to plan for future which is not static but changing, they often find themselves in great constraints. Such problems are more prominent in bureaucratic organizations where rules and procedure become more important than results.

- **Capital Investment:** In most cases once funds are invested in fixed assets, the ability to switch future course of action rather limited, and investment itself becomes a planning premise. During the entire life, of the fixed assets this inflexibility continues unless the organization can reasonably liquidate its investments, change its course of action, or unless it can afford to write-off the investment.

4. **External Inflexibilities:** Besides the internal inflexibilities, managers are confronted with much external inflexibility and they do not have control over these. For example; managers have little or no control over social, economic, technological and political forces. Whether these change quickly or slowly, they do stand in the way of effective planning. Three environmental factors generate inflexibilities for an organizational planning: political climate, trade unions, and technological changes.

- **Political Climate:** Every organization, to a greater or lesser degree, is faced with the inflexibility of the political climate existing at any given time. Attitudes of government towards business, taxation policy, regulation of business, etc., generate constraints on the organizational planning process. Government being the major supplier of certain raw materials, finances through financial institutions may affect the business organizations considerably.

- **Trade Unions:** The existence of trade unions, particularly those organized at the national level, tends to restrict freedom of planning. Apart from wages and other associated benefits, they affect the planning process by putting limitations on the work that can be undertaken by the organization. They set up the work rule and productivity. To that extent, managers are not free to make decisions of their choice.

- **Technological Changes:** The rate and nature of technology changes also present very definite limitations upon planning. An organization is engaged in its process with a given technology. When there is a change in technology, it has to face numerous problems resulting into higher cost of production and less competitive competence in the market. However, the organization cannot change its technology so frequently. Thus higher rate of technology changes more would be the problem of long-range planning.

5. **Time and Cost Factors:** Planning process is quite a costly and time consuming process. The various steps of planning may go as far as possible because there is no limit of precision in planning tools. Managers can spend unlimited amount of time in forecasting, evaluating alterative, developing supporting plans, or attending other aspects of planning, if they do not have limitations of time and money. Planning process suffers because of time and cost factors. Time is a limiting factor for every manager in the organization. If managers are busy in preparing elaborate reports and instructions beyond certain level, they are risking their effectiveness. Excessive time spent on securing information and trying to fit all of it into a compact plan is dysfunctional in the organization.

Besides time factor, planning is also limited because of cost factor. Planning cost increases if planning becomes more elaborate and formalized. Additional staff is to be appointed. Looking, at the cost aspect, many people have commented that planning consumes more but contributes less. Thus, planning cannot be undertaken beyond a certain level. It should be taken at a level where it justifies its cost. Apart from direct cost involved in manager's time, financial compensation for those who are involved in planning, paper work, etc., planning may be costly to the organization indirectly. Plans provide rigidity of action, though the action is based on future projection. If future events change, the organization does not have any alternative except to sustain loss on the investment committed for planning period.

6. **Failure of People in Planning:** Apart from the above factors, sometimes, people involved in planning process fail to formulate correct plans. There are many reasons why people fail in planning at

the formulation level as well as implementation level. Some of the major reasons for failure are: lack of commitment to planning, failure to formulate sounds strategies, lack of clear and meaningful objectives, tendency to overlook planning premises, failure to see the scope of plan, failure to see planning as a rational approach, excessive reliance on the past experience, lack of top management support, lack of delegation of authority, lack of adequate control techniques etc. These personnel factors are responsible for either inadequate planning or wrong planning in the organization.

5.7 Summary

In designing an environment for effective performance of individuals working together in groups, a manager's most important task is to see that everyone understands the group's purposes and objectives and its methods of attaining them. If a group effort is to be effective, people must know what they are expected to accomplish. This is the function of planning. It is the most basic of all managerial functions. Planning involves selecting missions and objectives and the actions to achieve them. It requires decision making, that is, choosing from among alternative future courses of action. Planning also strongly implies managerial innovation. It bridges the gap from where we are to where we want to go. Planning as a management function is essential for every manager and every organization, but there are some practical problems in proper planning. The reasons why people tend to fail in planning emphasizes that the practical difficulties encountered in planning disclose that effective planning is not easy. Managers can do better if they are aware of these limitations so that they can take adequate precautions against them.

5.8 Self Assessment Questions

1. Define planning. Discuss various characteristics of planning function.
2. Describe different types of planning.
3. "To be effective, planning requires some systematic principles." Comment and discuss major planning principles.
4. What is planning? State its obstacles and limitations.
5. Discuss the nature of planning as an open system approach and a rational process. How can be planning considered as pervasive?
6. What is corporate planning? How does strategic planning differ from operational/strategic planning?
7. How long-term planning differ from short-term planning? How both can be coordinated?
8. What is plan? How does it differ from planning?

5.9 Reference Books

- Prasad L M (2005), "Principles and Practice of Management", Sultan Chand & Sons, New Delhi.
- Koontz H and Weihrich H (2004), "Essentials of Management", Tata McGraw Hill, New Delhi.
- Sudha G S (2000), "Business Management", RBSA, Jaipur.
- Chhabra T N (1988), "Principles and Practice of Management", Dhanpan Rai & Sons, Delhi.

Unit - 6 Process and Components of Planning

Structure of Unit

6.0 Objectives

After completing this unit, you will be able to:

- Discuss the basic framework of planning process as an element of managing.
- State the major steps involved in planning process
- Identify the importance and techniques of forecasting.
- Understand tools, techniques and components of planning

6.1 Introduction

There is nothing about an organization more important than its future. Owners, management, employees, and society in general are, or should be, more concerned about where a company is going than where it has been. In any situation the responsibility for visualizing, initiating, and achieving future objectives rests with top management. The more specifically the future course of a company is conceived and defined; the more likely is its realization. One of the greatest needs observed is for adequate planning and clarification of future objectives, both near-term and long-term. The purpose of planning is not to show how precisely we can predict the future, but rather to uncover the things we must do today in order to have a future.

6.2 Planning Process

It is not necessary that a particular planning process is applicable for all organizations and for all types of plans because the various factors that go into planning process may differ from plan to plan or from one organization to another. For example, planning process may differ from plan to plan or from one organization to another. For example, planning for a major action will take more serious evaluation of various elements necessary for planning process may not be taken in the same ways as in a large organization. Here is given a process of planning which is applicable for a major Programme like opening of a new product line or acquisition of a major plant. With minor modifications, the process is applicable to all types of plans.

The sequences of various steps in planning are in such a way that they lead to the translation of an idea into action by reaching to the state of establishing of sequences of activities. Each stage contributes to plan formulation in the following ways:

a) Perception of opportunities : Perception of opportunities is not strictly a planning process. However, this awareness is very important for planning process because it leads to formulation of plans by providing clue whether opportunities exist for taking up particular plans. From this point of view, it can be considered as the beginning of planning process. Perception of opportunities includes a preliminary look at possible opportunities and the ability to see them clearly and completely knowledge of where the organization stands in the light of its strengths and weakness an understanding of why the organization wants to solve uncertainties, and a vision of what it expects to gain. This provides an opportunity to set the objectives in real sense because the organization tries to relate itself with the environment. In doing so, it takes the advantages of opportunities and avoids threats. This is a preliminary stage, hence the analysis of environment is not taken in very elaborate form but analysis relates to the determination of opportunities at first instance. Once the opportunities are perceived to be available, the other steps of planning are undertaken.

b) Establishing objectives. At this stage, major organizational and unit objectives are set. Objectives specify the results expected and indicate the end points of what is to be done, where the primary emphasis is to be placed and what is to be accomplished by the various types of plans. the organizational objectives should be specified in all key result areas. Key result areas are those which are important for organization in achieving its objectives. These are identified on the basis of organizational objectives. For example, for an organization, key result areas may be profitability, sales, research and development manufacturing and so on. Once organizational objectives are identified, objectives of lower units and subunits can be identified in that context. Organizational objectives give direction to the nature of all major plans which, by reflecting these objectives, define the objectives of major departments. These in turn, control the objectives of subordinate departments, and so on down the line. Thus, there will be hierarchy of objectives in the organization.

c) Planning premises. After determination of organizational goals, the next step is establishing planning premises, that is, the conditions under which planning activities will be undertaken. Planning premises are planning assumptions the expected environmental and internal conditions. Thus, planning premises are external and internal. External premises include total factors in takes environment like political social, technological, competitors plans and actions, government policies, etc. internal factors include organization's policies, resources of various types and the ability of the organization to withstand the environmental pressure. The plans are formulated in the light of both external and internal factors. The more individual charged with planning understand and utilize consistent planning premises, the more coordinated planning with be forecasting plays a major role in planning premises. The nature of planning premises differs at different levels of planning. At the top level, it is mostly externally focused. As one moves down the organizational hierarchy, the composition of planning premises changes from external to internal. The major plans, both old and new, will materially affecting a subordinate manager's area of authority become premises for the latter's planning.

d) Identification of Alternatives. Based on the organizational objectives and planning premises, various alternatives can be identified. The concept of various alternatives suggests that a particular objective can be achieve planning through various actions for example if an organization has set its objective to grow further, it can be achieved in several ways like expanding in the same field of business or product line, diversifying in other areas, joining hands with other organizations, or taking over another organizations and so on. With in each category, there may be several alternatives. For example diversification itself may point out the possibility of entering into one of the several fields. The most common problem with alternatives is not that of finding of alternatives only but to reduce the number of alternatives so that most promising ones may be taken for detailed analysis. Since all alternatives cannot be considered for further analysis, it is necessary for the planner to reduce in preliminary examination the number of alternatives which do not meet the minimum preliminary criteria. Preliminary criteria can be defined in several ways, such as minimum investment required, matching with the present business of the organization, control by the government, etc. For example, one company has defined preliminary criteria in terms of size of investment in new project and may not consider any project involving investment of less than Rs. 40 crores.

e) Evaluation of Alternatives. Various alternatives which are considered feasible in terms of preliminary criteria may be taken for detailed evaluation. At this storage, an attempt is made to evaluate how each alternative contributes to the organizational objectives in the light of its resources and constraints.

This presents a problem because each alternative may have certain positive points on one aspect but negative on others. For example, one alternative may be most profitable but requires heavy investment with long gestation period; another may be less profitable but also involves less risk. Moreover, there is no certainty about the outcome of any alternative because it is related with future and future is not certain. It is affected by a large number of factors making the evaluation work quite complex. This is the reason why more sophisticated techniques of planning and decision making have been developed. Such techniques will be described.

f) Choice of Alternative: After the evaluation of various alternatives, the fit one is selected. Sometimes evaluation shows that more than one alternative is equally good. In such a case, a planner may choose more than one alternative. There is another reason for choosing more than one alternative. Alternative course of action is to be undertaken in future which is not constant. A course of action chosen keeping in view the various planning premises may not be the best one if there is change in planning premises. Therefore, planner must be ready with alternative, normally known as contingency plan, which can be implemented in changed situations.

g) Formulation of Supporting Plans. After formulating the basic plan, various plans are derived so as to support the main plan. In an organization there can be various derivative plans like planning for buying equipments, buying raw materials, recruiting and training personnel, developing new product etc. these derivative plans are formulated out of the main plan and therefore they support it.

h) Establishing Sequence of Activities. After formulating basic and derivative plans, the sequence of activities is determined so that plans are put into action. Based on plans at various levels, it can be decided who will do what and at what time. Budgets for various periods can be prepared to give plans more concrete meaning for implementation.

Activity A:

1. You are planning to buy a gift for your parents for their marriage anniversary. Match the different steps of planning process with your actual behavior and analyze the implication of planning process in real life situations.

6.3 Forecasting

An organization has to formulate its plants within the limitations of various factors. In order to formulate accurate plans, managers have to find out the likely behavior of these factors in future. This can done to some extent by making suitable forecast. A major factor in the increased use of systematic planning throughout the world in recent years is the increased effectiveness of forecasting techniques. The effectiveness has been pronounced in two broad areas where forecasting is needed prediction of broad economic trends and product sales of individual organizations. There has also been development in the entirely new area of forecasting with the prediction of technological development and other types of innovations.

1. Concept of Forecasting

Forecasting is the process of estimating the relevant events of future, based on the analysis of their past and present behavior. The future cannot be probed unless on knows how the events provides information about the future occurrences. Since forecasting may require the use of various statistical techniques, some persons equate this analysis with statistical analysis. For example Neter and Wasserman have defined forecasting as "Business forecasting refers to the statistical analysis of the past and current movement in the given time series so as to obtain clues about the future pattern of those movements.

However, it is not necessary that all forecasts require the same type of statistical analysis as suggested above. For example prediction of technological situation man not requires the use of statistics of the sort suggested above. On the basis of the definition, following features of forecasting can be identified.

i. Forecasting relates to the future events. This is needed for planning process because it devises future course of action.

ii. Forecasting defines the profitability of happening of future events. Therefore happening of future events can be precise only to a certain extent.

iii. Forecasting is made by analyzing the past and present relevant events, that is taking those factors which are relevant for the function of an organization.

iv. The analysis of various factors may require the use of various statistical tool and techniques. However, personal observations can also help in the process.

2. Planning and Forecasting Comparison

Some persons equate both planning and forecasting because both deal with future phenomena. However both are different and clear cut difference can be drawn between the two. The difference lies basically in the scope of two processes. Planning more comprehensive which indicates many sub processes and elements in order to arrive at decisions. Such decisions may be in terms of what is to be done, how to be done, and when to be done. Commitment of actions is the basic ingredient of planning. Forecasting on the other hand, involves the estimate of future evens and provides parameters to the planning. Forecasting process may also involve many sub processes and elements but these are used to project what will happen in future. This may not require any commitment of action but may help in planning the future course of action. In fact, forecasting is one of the major ingredients of planning process because planning involves determination of future course of action in the light of forecast made.

There is another difference between planning and forecasting. Since planning involves making comprehensive decisions in the organization which will determination where the organization would like to go, a large number of persons are involved in planning process, though major decisions are made at the top level. Forecasting in normally taken at middle or lower level. The work may be entrusted to staff positions which may help in arriving at planning decisions. Forecasting does not involve decision making but helps decision making by providing clue about what is likely to happen in future. Therefore, forecasting activity can be taken by those persons what may not affect whole of the organization or its major portion by their decisions.

3. Importance of Forecasting

The need and importance of forecasting is apparent from the key role it plays in management process, particularly in planning process. in fact, every decisions in the organization is based on some sort of forecasting. It helps management in the following ways.

i. **Promotion of organization**. An organization is established in order to achieve by performance of certain activities. What activities should be performed depends on the expected outcome of these activities. Since expected outcome depends on future events and the way in which an activity is being performed, forecasting of future events is of direct relevance in achieving an objective. Thus, even before establishing an organization, the promoter of the organization must know how the various factors in the environment will behave over a period of time. A successful promoter is one who can forecast what will happen. In fact, many entrepreneurs project the shape of things to some on the basis of their experience and take the advantages.

ii. **Key to planning:** forecasting is an essential ingredient of planning. It is key to planning process. Planning decides the future course of action. However, this future course of action does not take place in vacuum but in certain circumstances and conditions. Unless the managers know these conditions they cannot go for effective planning or even planning at all. Forecasting generates the planning process. it provides the knowledge of planning premises within which managers can analyze their strengths and weaknesses and can take appropriate actions in advance before actually they are put out of market. Forecasting provides the knowledge about the nature of future conditions. For example, if there is a change in consumer's preferences for substitute products, managers can take action to combat this problem by changing to suitable mix of products. Suppose while conditions are still prosperous for steel pipe manufacturers but they find that gradually PVC pipes are coming in the market and being cheaper are replacing steel pipes, they can take suitable action to overcome this problem. The steel pipe manufacturers can know that in future demand for steel pipes will go down, they can assess exactly how much market they will lose, they can take action for diverting their business either by going into manufactures of PVC pipes or in some other business. At the same time, however, if they find that PVC pipes offer very limited competition and market for steel pipes is also expanding they can concentrate on the same business. Thus, forecasting will provide where the efforts should be put.

iii. **Coordination and control.** Forecasting provides the way for effective coordination and control, though indirectly. Forecasting requires information about various external and internal factors. The information is collected from various internal sources beside the external sources. Thus, almost all units of the organization are involved in the process which provides interactive opportunities for better unity and coordination in the planning process. Similarly forecasting can provide relevant information for exercising control. The managers can know their weaknesses in forecasting process and they can take suitable action to overcome these.

iv. **Success in Organization:** All business organizations are characterized by risk and have to work within the ups and downs of the industry. In fact, profit is the reward for bearing risk and working under uncertainties. The risk depends on the future happenings and forecasting's provides help to overcome the problems of uncertainties. Though forecasting does not check the future happenings, it provides clues about those and indicates when the alternative action should be taken. Managers can save their business and face the unfortunate happenings; it provides clues about those and indicates when the alternative action should be taken. Managers can save their business and face the unfortunate happenings if they know in advance what is going to happen. The business can be saved from the impact of trade cycles. A manager can just work like a navigator. A navigator cannot control the sea tides and other disturbances but he can take his ship at the right path and save it from these disturbances if he knows them in advance.

4. Limitations of Forecasting

No doubt, forecasting is an essential ingredient, but is should not be concluded forecasting is the only element which goes into planning and other areas of organizational process. Forecasting provides base for assuming the behavior certain events which may not be fully true. Future uncertainties always put limitations on planning. If future could be accurately predicted, managers could be ahead without fear that their effort has gone naught. Therefore, managers should well aware about the limitations of forecasting while using it in arriving at certain decisions. In particular, adequate considerations should be given to the following limitations of forecasting.

i. **Based on Assumptions:** forecasting is based on certain assumptions. It suggests that if an event has happened this way in the past, it will happen that in the future. The basic assumption behind this is that events do not change happens hardly and speedily but change on a regular pattern. This assumption may not be good. In fact, there are various factors which go into determining the occurrence an event. The behavior of all these factors which go into determining the occurrence an event. The behavior of all these factors may not be similar. A change particular factor may be so unpredictable and important that it may affect the business situation. For example, if the government increases taxes on certain commodities, their substitutes will be in high demand. The changes in tax structure in case cannot be forecast. Similarly war between two countries can change the business situations. All these events are not subject to precise forecast because it do not depend solely on the assumption that future follows the past.

ii. **Not Absolute Truth.** Forecasts are not always true, they merely indicate trend of future happenings. This is so because the factors which are taken account for making forecast are affected by human factor which is highly unpredictable. Various techniques of forecasting suggest the relationship among various known facts. They can project the future trends but cannot guarantee that would happen in future. More is the period of forecasting, higher is the degree error. Therefore, it has been commented that "the only thing you can be sure all any forecast is that it will contain some error. Therefore, while using forecast managers should take this fact into consideration.

iii. **Time and Cost Factor.** Time and cost factor is also an important aspect of casting. While the above factors speak of limitations inherent in forecasting, time cost factor suggests the degree to which an organization will go for formal forecasting. For making forecast of any event, certain information and data are required. Some of these may be in highly disorganized form; some may be in qualitative form. The collection of information and conversion of qualitative data into quantitative ones involves lot of time and money. Therefore managers have to trade off between the cost involved in forecasting and resultant benefits. This is the reason why the smaller organizations do not go for formal system of forecasting.

5. Steps in forecasting

Forecasting is a process and therefore it proceeds through a series of steps. Depending on the level of formalization and intensity of forecasting, varying emphasis is put on these steps. These steps are as follows :

i. **Developing Groundwork for forecasting.** The first step in forecasting is to develop ground work for forecasting which involves understanding of why changes are likely to take place both at macro level and micro level. The companies involved in forecasting future trend, generally, take past records as basis which might be available internally if proper information system has been developed. However, a mechanical and purely mathematical forecast based on the past data may not be worthwhile in the fast changing environment. Therefore the companies have to take into account various factors which are not reflected in the past data. For example in post liberalization era, the demand for the products has increased at macro level but because of increased competition, many companies have lost their market share.

ii. **Estimating future business.** Based on the past data and identification of events that are likely to affect the future behavior of the business, the trend for the business as a whole and market share of the companies concerned are determined by using various techniques – qualitative and quantitative. The trend is projected after a step by step procedure in which the relevant information is put for close scrutiny and analysis. The business trend which emerges out of this analysis will suggest the likely behavior which may or not correspond with actual. For example, when Government of India prepares its plans, it projects various outcomes at the end of a plan. However, we, often find that many outcomes do not match with the projected ones because of a variety of reasons. Therefore, the projected trend should be used as guideline and not as absolute truth.

iii. **Comparing actual and projected results:** Since there is a likelihood of deviation between actual and projected results, a provision should be made to identify the deviation as quickly as possible so that necessary changes are incorporated in plans. Many companies prepare plans on the basis of certain forecasts but either they modify their plans or abandon these midway because of the changed environmental situations or because of the wrong projection of business trends.

iv. **Refining the Forecasting Process:** The above three steps complete a cycle of forecasting. However, forecasting, being a continuous process and not one shot action is performed continuously with each time, there may be refinement in the forecasting process and therefore, its outcomes. These above steps help the managers to gain proficiency in making dependable forecasts as the time advances, they are able to refine, sharpen and adjust the forecasting techniques to meet the changing needs of their business. Since there are many qualitative variables which affect business trends, their interpretation requires considerable experiences.

6. Techniques of Forecasting

There are various methods of forecasting ranging from simple intuitive methods to the use of highly complex models. However, no method can be suggested as universally applicable. In fact, most the forecasts are done by combining various methods. The major forecasting methods are historical analogy, survey, opinion, polls, business barometers, time series analysis, extrapolation, regression analysis, input out put analysis, and econometric models. These techniques can be used for making forecast of any type economic forecast, sales forecast technological forecast. A brief discussion of these is given below.

i. **Historical Analogy Method:** Under historical analogy method, forecast in regard to a particular phenomenon is based on some analogous conditions elsewhere in the past. This method is based on the stages of economic development as suggested by Rostow. According to him, an economy has to pass through certain stages before the stage of takeoff and later of high mass consumption. Since this is true for all the economies, the situation of a country can be forecast by making comparison with the advanced countries at a particular stage through which the country is presently passing. For example if the Indian economy is ready for takeoff which was the condition prevailing in USA around 1940, the demand for various commodities can be forecast. Similarly, it has been observed that if anything is invented in some part of the world, this is adopted in other countries after a gap of certain time. Thus, based on analogy, a general forecast can be made about the nature of events in the economic system of the country. However, this method is more useful for indicating qualitative change in society. It is often suggested that social analogies have helped in indicating the trends of changes in the norms of business behavior in terms of life. Similarly changes in the norms of business behavior in terms of life. Similarly changes in the norms of business behavior in terms of attitude of the worker against inequality etc., find similarities in various countries at various stages of the history of industrial growth. This method, thus gives broad indications about the future events of general nature.

ii. **Survey Method:** Field surveys can be conducted to gather information on the intentions of the concerned people, for example information may be collected through surveys about the likely expenditures of consumers on various items. Both quantitative and qualitative information may be collected. Such information may throw useful light on the attitude of the consumers in regard to various items of expenditure and consumption. On the basis of such surveys, demand for various goods can be projected. To limit the cost and time, the survey may be restricted to a sample from the prospective consumers. Survey method is suitable for forecasting demand both of existing and new products.

iii. **Opinion Poll:** Opinion poll is conducted to assess the opinion of the knowledgeable persons and experts in the field whose views carry a lot of weight. For example, opinion polls are very popular to predict the outcome of elections in many countries. Similarly an opinion poll of the sales representatives, wholesalers or marketing experts may be helpful in formulating demand projections. The opinion poll of technical experts may be helpful in estimating the life of a technology. If opinion polls give widely divergent views, these can be carried a step further in which experts may be called for discussion and explanation of why they are holding a particular view. They may be asked to comment on the views of the others, to revise their views in the context of opposing views, and consensus may emerge. This, then, becomes the estimate of future events.

iv. **Business Barometers:** In physical science, a barometer is used to measure the atmospheric pressure. In the same way, index numbers are used to measure the state of economy between two or more periods. These index numbers are the divide to study the trends, seasonal fluctuations, cyclical movements, and irregular fluctuations. These index numbers, when used in conjunction with one another or combined with one or more. Provide indications as to the direction in which the economy is heading. For example, a rise in the rate of investment now may herald an upswing in the economy and may reflect higher employment and income after some time. Again an upswing in economic activity may lead to higher personal income and expenditure after lag of some period. These lag periods may be difficult to predict precisely but they give some advance signals for likely changes in future. Thus, with the help of business activity index numbers, it becomes comparatively easy to forecast the future course of action. However, it should be borne in mind that business barometers have their own limitations and they are not sure road to success. All types of businesses do not follow the general trend but different index numbers have to be prepared for different activities. This is the reason why index numbers are prepared for industry, agriculture, transport etc.

v. **Time series analysis:** Time series analysis involves decomposition of historical series into its various components, viz. trend, seasonal variations, cyclical variations, and random variations. Time series analysis uses index numbers but it is different from barometric technique. In barometric technique, the future is predicted from the indicating series which serve as barometers of economic change. In time series analysis, the future is taken as some sort of an extension of the past. When the various components of a time series are separated, the variation of a peculiar phenomenon the subject under study, say price, can be known over the period of time which may be true for future also. However, time series analysis should be used as a basis for forecasting when data are available for a long period of time and tendencies disclosed by the trend and seasonal factors are fairly clear and stable.

vi. **Extrapolation:** Extrapolation is also based on time series because it relies on the behaviors of a series in the past and projects the same trend in future. This method does not isolate the effects of various factors influencing a problem under study but takes into account the totality of their effects and assumes that the effect of these factors is of a constant and stable pattern and would continue as such in future. Since the projection of future is based on past, it is essential that the growth curve of a series is chosen after a very careful study of its past behavior.

vii. **Regression Analysis:** Regression analysis is meant to disclose the relative movements of two or more interrelated series. It is used to estimate the changes in one variable as a result of specified changes in other variable of variables. In economic and business situations, there is multiple causation and a number of factors affect a business phenomenon simultaneously. Regression analysis helps in isolating the effects of such factors to a great extent. For example if we know that there is a positive relationship between advertising expenditure and volume of sales or between sales and profit, it is possible to have estimate of the sales on the basis of advertising or of profit on the basis of projected sales, provided other things remain the same. Regression analysis can be used to build models. These models can be seen taking into account linear relationship between two variables only or complex linear relationship having more than two variables. Generally the regression correlation analysis is used for processing the statistical data and deriving a generalized mathematical relationship which subject to a certain error, can be used forecasting the expected values of the dependent variables in future if the value independent variables are known. For example, if quantity of fertilizers being presently is known and also the rate at which the annual consumption is increase in the demand for fertilizers can be predicted for distant future.

viii. **Input Output Analysis:** Under this method, a forecast of output is based given input if relationship between input and output is known. Similarly in requirement can be forecast on the basis of final output with a given input out relationship. It is because of this mechanism that the technique is known as input output analysis or end use technique. The very basis of this technique is that various sectors of economy are interrelated and such interrelationships are established. Such relationships are known as coefficients in mathematical terms example, coal requirements of the country can be predicted on the basis of its rate in various sectors, say industry, transport, household, etc. and on the basis how the various sectors behave in future. This technique yields sector wise forecast and is extensively used in forecasting business events as the data required for application are easily obtained.

ix. **Econometric Models**: The word econometric is made up of two words econometric and metric thereby referring to the science of economic measurement. In economic method, mathematical models are used to express relationship among variables. The models take the form of a set of simultaneous equations. The constants in these equations are arrived at by a study of time series and since the variables affecting a business phenomenon are many, a large number of equations may have to be formed to arrived a particular econometric model. These equations are not easy to formulate but advent of computers has made the formation of these equations relatively easy. Construction of an econometric model is very expensive, technical and complicated and individual organizations can ill afford to have such models of their own. They have to rely on aggregate or macro level models developed by specialized forecasting agencies or institutes. These aggregate models are, however, useful in making micro level studies by individual organizations.

Activity B :

1. Analyze the applicability of different forecasting techniques in real life situation and discuss its importance to planning.

6.4 Tools and Techniques of Planning

1. Management by Objectives : Management by objectives (MBO) or management by results (MBR) has drawn considerable attention of both academicians as well as practitioners because of two reasons. First it focuses sharply on the objectives or results which a manager is expected to achieve within a specified period. Second it emphasizes participative management, an approach which provides high motivation to individuals in the organization. The term MBO was coined by Peter Drucker in 1954 when he emphasized the concept of managing by objectives. Since then, many organizations, both business and non business, have adopted this in some form or the other. (MBO is explained in detial in unit no. 7)

2. Time event network analysis : Time event network analysis helps to know how the parts of a Programme fit together during the passage of time and events. This is undertaken to ensure that the Programme or project is completed within the stipulated time. In a repetitive and mass production system, once time event network analysis is undertaken, it works for a time till new system is introduced. However, in the case of project completion which is entirely new as compared to the previous project, time event network analysis has to be undertaken a fresh. For example construction of a bridge or manufacturing a space satellite, etc. requires time event network analysis every time the project is undertaken. In these cases, time element is one of the most significant considerations because if the project is not completed within the specified time, the organization has to pay heavy penalty. There are three major techniques for this analysis. Gantt chart, milestone budgeting and PERT / CPM though PERT / CPM is the most popular.

3. Gantt chart : Gantt chart has been developed by Henry Gantt early in twentieth century culminating in the bar chart bearing his name. Gantt recognized that total Programme goals should be regarded as a series of interrelated derivative plans that people could comprehend and follow. Based on this recognition, he identified the relationship among different activities required to complete a Programme. Such relationship was expressed in terms of the starting time of various activities since some of the activities were independent of others while some of the activities were dependent on others. For example construction of building can start only after acquisition of land and therefore these two activities are dependent. In the same example, construction of house and making application for electricity connection and pursuing for it can go together. Thus, both these activities are independent to some extent. Based on this premise, Gantt chart was developed which has been presented in fig.

In the Gantt chart, it is indicated that two or more activities which have sequential relationship must be completed in that order. However, the chart does not depict the relationship between one group of activities with another group of activities. For example, it shows relationship among two activities in task A but does not show relationship between task A and B or other task. In order to overcome this problem milestone budgeting and PERT / CPM network has been developed.

4. **Milestone Budgeting :** Milestone budgeting also known as milepost budgeting breaks a project into controllable pieces and then follows them carefully. A milestone is an identifiable segment of a project. When accomplishment of a given segment occurs its costs or other results can be determined. For applying milestone budgeting, a project is broken into subprojects that can be completed individually, in a time sequence, to be ready when needed. For example, a project involving manufacturing of an electrical machine may be broken into design of a circuit, a motor a driving mechanism, a signal feedback device, and similar components, each being completed individually in a time sequence. Thus control is exercised at each level to see how the progress is made in terms of time. The milestone budgeting is an improvement over Gantt chart in the sense that it establishes relationships between two or more segments of a project. how forecast however, such a relationship is not completely depicted in milestone budgeting and in order to overcome this problem. PERT / CPM has been developed.

5. **PERT / CPM :** PERT (Programme Evaluation and Review Technique) was developed by the special project office of the US Navy in 1958. Almost at the same time, engineers at the Du pont company, USA also developed CPM (Critical Path Method). Though there is some difference between PERT and CPM both utilizes the same principles. The basis difference between the two is that CPM assumes the duration of every activity to be constant, therefore, every activity is either critical or not. In PERT, uncertainty in the duration of activities, most likely duration and is measured by three parameters most optimistic duration, most likely duration and most pessimistic duration. PERT / CPM is used either to minimize total time, minimize total cost, minimize cost for a given total time, minimize time for a given cost, or minimize idle resources.

- **Process of PERT / CPM :** A Programme consists of several activities and sub activities. In order to complete the Programme, these activities, sub activities should be completed in a proper sequence and in allotted time. Since some of the activities can be taken simultaneously a network is developed to show the sequence, time taken, and the time of start of particular actives. The whole process involved in the preparation of PERT / CPM is as follows.

a) Identification of activities: Activities represent jobs that should be performed in order to complete Programme or project. Each activity takes some specific time under given conditions.

b) Sequential arrangement of activities. There is always a technological sequence in the various activities of a project. Preceding and succeeding events should be located to bring the sequence. Preceding events are those which should be completed before a particular event can start. Succeeding events are those that immediately follow another event.

c) Time estimates of activities. All events are associated with a definite point of time and as such, events provide a basis of measuring the progress of a Programme. Hence, there should be correct estimate of time taken by each activity. However the activities are performed in future and it may not be possible to forecast the future happening correctly, consequently the correct time estimate of activities. To over come this problem, three time estimates are taken optimistic time showing the least time of an activity, pessimistic time showing the maximum time of activity, and most probable time which like in between the two. The expected time of an activity is calculated by

$$\frac{0 + 4m + p}{6}$$

d) Network Construction. All activities of a Programme are connected sequentially to form a network known as PERT network.

Following are rules for construction of PERT / CPM network.

(i) One and only one arrow represents each completely defined activity

(ii) The length of the arrow does not depend upon the duration of the activity but is governed by the need for convenience and clarity.

(iii) The start or termination of an activity is represented by code or a circle.

(iv) Arrows originated at an event indicate activities that can begin only when all the activities terminating at that event have been completed.

(v) If an event takes precedence over another but there is no activity to connect them, a dummy arrow represented by dotted line is used.

(vi) For clarity, thick arrows or different colored arrows are used to show critical path activities after they have been identified through analysis.

(vii) Events are distinguished by numbers. No two events can have same number. Each event, which indicates termination of an activity, has higher number than the event which indicates start of the same activity.

e) Critical Path. On the basis of analysis, critical activities are determined. These are represented by a critical path which shows that if activities on this path are not completed in time, the entire project will be delayed by the amount the event is delayed. Thus based on estimates the earliest or latest start time of an activity can be calculated.

Activity C:

1. Define and arrange in logical sequence the activities required to perform in purchasing a personal computer by a large scale organization and construct a network diagram for the same.

6.5 Components of Planning

There are a number of different facets or components of planning. They are also called types of plans. They encompass the scope of planning. The major types of management plans along with their components can be classified as follows :

A. Strategic plans

These are designed to meet the broad objectives of the organization. These are concerned with broad matters that vitally affect development of an organization. They are prepared at the institutional level. They include mission or purpose, objectives and strategies.

B. Standing Plans

These plans are used over and over again. Once established, standing plans provide on going guidance for performing recurring activities. Similar situations can be handled in a predetermined way. Thus, they save the time used for making decisions. Examples of such plans are policies, procedures, methods, rules and regulations.

C. Single use plans

These plans are designed to achieve specific goals. They are developed to meet unique situations or problems. They are used but once and discarded. Programme, projects, budgets, quotas schedules, and standards are examples of single use plans.

1. Missions or Purpose

Mission or purpose is a primary and overall objective of an organization. It is the basic function or task of an enterprise which is assigned to it by society. It is organizations reason for existence determined by its founders, owners, or board of directors. In fact, purpose or mission is a definition of the organization. The mission indicates the firm's identify. It provides directions and guidelines for constructing goals and strategies at various organizational levels. The objectives are derived from purpose.

Mescon and Albert observe, "Without a mission as a guide, managers would have nothing but their individual values." In brief the purpose or mission of an organization must convey the following

a) The existence of the firm – it means what business is the firm in?
b) The external environment that determines the operating philosophies of the firm
c) The organization culture

2. Objectives or goals

Objectives or goals are the ends towards which all organizational activities are aimed. Koontz and O'Donnell state," The represent not only the end point of planning but the end towards which organizing, staffing, leading and controlling are aimed." Objectives decide where we want to go. They are the results to be achieved. They are the performance targets. In brief, objectives and goals are preferred results or ends towards which all organizational action is directed.

Goals and objectives are often used interchangeably but a few writers make a distinction between them. Objectives are broad outcome that managers hope to achieve ultimately. Goals are more specific and concrete in nature and often include active schedule for the completion of a task. For example profitability may be the objective, but the specific goal is to earn 20 per cent net return on capital employed.

- **Characteristics** – according to Hicks and Gullett, objectives possess the following characteristics.

a) Objectives are structured in a hierarchy
b) They reinforce individual objectives, and vice versa
c) They are complementary with individual objectives
d) Higher level objectives contain subordinate objectives.
e) They are influenced by the aspiration of mangers
f) They reflect a desired end result of organization actions

- **Importance** – the importance of clearly defined objectives is recognized in the following way.

1) Objectives are necessary for unified planning and coordinated effort
2) They serve as reference points for the efforts of the organization.
3) They help to compete effectively and to grow.
4) They provide motivation to people in the organization
5) They define the destination of the organization
6) Objectives are prerequisite to determining sound policies, procedures, and strategies
7) They are yardsticks for measuring and evaluating performance
8) Objectives can be good motivators
9) They provide direction and serve as standards
10) They produce consistency in decentralized decision making

- Sound objectives and goals must have the following features

a) Objectives should be specified and measurable
b) Objectives should be time oriented. They should have specific time horizon.
c) Objectives must be attainable
d) They should focus on results, not on activities
e) They should be challenging but realistic
f) They must be set by the people responsible for accomplishing them, wherever possible
g) Multiple objectives must be mutually supportive

3. Strategies

The term strategy was first used in the military to describe the grand plan for winning a war. In recent times, it is widely applied to business. According to Hicks and Gullett strategy is "the basic pattern of purposes and policies that define the firm and its business. Andrew Szilagyi defines strategy," as a comprehensive and integrated frame work that guides those choices that determine the nature and direction of the organization's activities towards goal achievement". H. Igor Ansoff, a leading expert, says, basically strategy is a set of decision making rules for guidance of organizational behavior.

Thus, strategy refers to two things – the overall goal or mission and the means by which the goals will be achieved. Strategy has the following features.

a) Strategy is a general Programme of action. It reflects broad overall concepts of an enterprises operation.
b) It is an "interpretative planning"
c) It is an action plan to achieve goals in the light of environmental forces
d) It involves a choice of particular actions or activities
e) Strategy sets direction. It must be formulated before plans are made.
f) It implies a deployment of emphasis and resources. It guides enterprise thinking and action.
g) Strategy has a competitive implication. Its purpose is to achieve success in a competitive environment.
h) Corporate strategy is not statistic, but evolves over time. It has to be dynamic. Hicks and Gullett state, "A strategic plan is the intended relationship between the firm and its environment.

Strategy guides managers in setting priorities and taking actions to achieve objectives. Strategic plan is the system though which resources are organized and directed to achieve the strategic goal.

4. Policies

General statements or understanding that guide decision making are called policies. Policies define the boundaries within which decisions can be made. They direct decisions towards the achievement of objectives. According to Terry, "Policies spell out the sanctioned, general direction and areas to be followed"

- Features – Policies have the following features

1) Policies direct the thinking, behaviors and actions of employees.
1) Policies may be implied even from the actions of managers or from the practice of enterprise
2) They may be interpreted as standing orders or standing guidelines for decision making.
3) Policies allow for some desertion and initiative, but within limits
4) Policies define the area in which decisions are to be made, but they do not give the decision.
5) They flow from strategies. They are narrower in scope that strategies.

6) Policies have at least as many levels as organization, ranging from broad company policies to minor policies of a small section.
7) They may also be related to functions – such as production, sales, finance or engineering.

- Function and importance of a sound policy : Sound policies have great value in smooth functioning of an enterprise. They tell managers what to do and create a better understanding of work. Policies have great importance in predicting action. They encourage sound judgment and "force positive, wanted action." They facilitate the performance of managerial functions. According to R.C.C Davis, policies provide the following benefits

1) Policies give meaning to the organizational goals
2) They prevent deviations from planned courses of action
3) They secure uniformity in performance
4) They facilitate coordination of action
5) They foster initiative and confidence
6) Policies are guides to thinking in decision making and planning.
7) They prevent bad action and promote the quality of execution action.

Policy making is the task of all the managers. A sound and clearly defined policy is essential for efficient performance. Policy formulation is a vital phase of hte planning process.

- Prerequisites for a Sound Policy

a) It must contribute to the organizational objectives
b) It should be uniform in its application, offering equity and justice to all
c) A policy should permit interpretation
d) It should be expressed in definite and precise wording
e) It must prescribe criteria for current and future action
f) A policy should be built from facts, and not from opportunities decisions
g) It should be broad enough to cover a range of actions
h) It should be in harmony with external environment. It must confirm to laws and public interest.

- Types of policies : Like plans and objectives, policies are also formulated at all levels in an organization. They are classified on various bases. One important classification of policies is done on the basis of organization objectives as:
a) Basic policies – These are broad guidelines applicable to the entire concern
b) Departmental policies – these are meant for departmental decisions and are more specific
c) Operational or minor policies= which are applicable to the operations of units within the various departments

Another common classification of policies is by major function of an enterprise, namely production policies, financial policies and personnel policies. Glover has mentioned three kinds of policies as (1) charter policies (2) general policies and (3) operational policies.

5. Procedures

Policies are carried out by means of procedures. A procedure is a detailed set of instructions for performing a sequence of actions. It is a customary method of handling activities. It provides the exact manner in which a certain activity must be accomplished. Terry defines a procedure as "a series of related tasks that make up the chronological sequence and the established way of performing the work to be accomplished. "Well established formalized procedures are called standard operation procedures.

- Characteristics of procedures

1) A procedure has a chronological sequence of tasks or actions
2) A procedure is specific and tailor made to achieve certain task
3) Procedures exist in every part of an organization
4) They spell out actions in detail
5) They are truly guides to action, rather than to thinking
6) Procedure often cut across department lines. That is, they may encompass various departments
7) They should be based on facts
8) Procedures should be table. They should have logical sequence

Examples of procedures include how customer orders are to be handled, recruiting procedures, loan procedure, and so on. A procedure has the following advantages.

a) It ensures uniformity of action
b) It saves managerial effort because it decreases the need for further decision making
c) It prescribes one best way and thus, increases efficiency.
d) It facilitates delegation of authority and placement of responsibility
e) It serves as a tool of managerial control and aids in coordination.

- Differences between policies and procedures

1. **Guidance:** Procedures are guides to action while policies are guides to thinking as well as to actions.
2. **Decision levels:** Policy is generally determined at higher levels, whereas procedures are formulated at lower levels of management.
3. **Position:** Policies occupy a higher position in hierarchy than procedures. In fact, procedures are reflection of policy. McFarland writes, "Procedures are always subordinate to policy, and policy making is a superior order of activity in executive responsibility.
4. **Strategic or tactical:** policies form part of the organization's strategies. But procedures are tactical, they are operational tools for efficient performance of routine activity.
5. **Flexibility :** Policies are relatively flexible while procedures are more determinative
6. **Role:** Polices serve as bridges between organizational purpose and performance. Procedures, on the other hand, are links between activities and outcomes.
7. **Objectives and path:** "Policy always sets an objective or delimits an area of action, while procedure fixes a path towards the objective or through the area. Sequence is the essential element of procedure" (Goetz)
8 **Method** :Method is the best way the job is to be performed. It deals with a task comprising one step of a procedure. It specifies how this one is to be performed. According to L.E. Bryant, "Method is the manner of proceeding in the performance of work."

It should be noted that a method is more limited in scope than a procedure. Procedure involves a series of steps to be taken while a method is only concerned with a single operation with one particular step. But fundamental to every action, a method is even more detailed as compared to a procedure.

6. Rules

Rules are standing plans that guide actions. They specify what actions will be taken or not taken and what behavior is allowed or prohibited. Rules are a particular way of behaving in a particular situation.

Generally, rules are all restrictive and leave little room for discretion. They are not guides for thinking or decision making; rather they are substitutes for them. "No smoking" is an example of a rule.

- **Rules differ from a policy, procedure, or method :** A rule is different from a policy in many ways (a) policies are broader and are stated in more general language. Rules are the narrowest of plans dealing with specific actions or approved behaviors. (b) Policies may be flexible, whereas rules allow no discretion in their application. (c) Rules are usually applied by specific and stated penalties. But policies allow a wider scope for disciplinary action (d) policy establishes a guiding frame work. Rules are devised or must work within this framework.

There are also basic differences between procedures and rules. Rule is related to a procedure, because it guides action. But it is not a procedure because it specifies no time sequence to a particular action. Secondly, a procedure is a sequence of rules. But a rule may or may not be a part of a procedure.

Rules are also different from methods (i) Methods are meant for efficient performance of tasks. Rules, one the other hand, are in the nature of warnings, principles or norms. (ii) Methods improvement may call for standardization of the related working conditions. To frame rules, no such standardization of conditions is needed (iii) Rules are often enforced officially or formally. They are authoritative and are part of control procedures. Methods are generally free from such bindings. They are scientific and logical means of ensuring better performance. (iv) Violation of rules is viewed seriously and requires imposition of penalty. On the other hand, deviation from methods is not taken seriously because sometimes methods may depend upon the employees' experience and knowledge (v) methods are physical and tangible to a greater degree as they relate to tasks and tools. Rules relate to individual and group actions in a particular situation.

7. Programme

A Programme is a comprehensive plan that covers a relatively large set of activities. It consists of a complex set of goals, policies, procedures, rules, job assignments and resources required to implement them. Programme usually include the following steps

a) starting what is to be done into different parts or units of the organization
b) determining the relationships among the parts and developing a sequence of steps required to reach an objective
c) Deciding the responsibility for each step and for each unit.
d) Determining the financial, physical and human resources to be employed
e) Determining capital and operating budges
f) Developing the order and time schedules for each step

Commitment of resources, coordinating and timing of steps are essential elements of a Programme. A primary Programme may call for many derivative Programme.

8. Projects

A project may be either a component of a general Programme or it may be planned separately on a smaller scale. Each project has its own assignments, time and budget. Sometimes, individual segments of a general Programme can be planned and implemented as distinct projects. William Glueck defines, "A project is a Programme with less significant objectives, generally a shorter period of time, and usually less detail." There is a significant difference between Programme and projects. Programme can be repeated while projects have one time applications. A project to build rest rooms or to fence dangerous machines may be part of a larger Programme to improve working conditions. Project is a flexible type of plan that may be adapted to a variety of situations. Each project becomes the responsibility of certain personnel who are given specific resources and deadlines.

9. Budget

A budget is a plan which expresses the anticipated results in numerical terms. It is merely a collection of figures or estimates that indicate the future in financial terms. According to Terry, "A budget is an estimate of future needs, arranged according to an orderly basis, covering some or all of the activities of an enterprise for a definite period of time." It is a statement of planned revenue and expenditure. A budget may be stated in time, materials, money, or other units.

Budgets are important device of planning, controlling and coordinating the activities. They are the most common form of communicating objectives. They show the future of the company in financial terms. Hence, sometimes budges are called numberized Programme. Budgets are prepared for various groups of activities.

10. Quota

Quota is a set goal for sales or other activities. It is the share one is bound to contribute to or entitled to receive from a total. A quota is a limit placed on the amount or units of sales, production, profit or other activities.

Quotas are set in the field of sales, markets or sales territories. For example, every sales territory carries an assigned quota indicating its contributions to profit and volume and its sales activity requirements. Quotas are important aspect of a company's operational plan.

11. Schedules

Schedules are important part of operational plans. Schedules are used to plan the timing and sequencing of the use of resources and for the work to be executed. Schedules are the basis of an action plan. A scheduling sets the exact time when each activity would start and when it would end. Schedules permit managers to see how the various segments of operations interrelate and to evaluate the overall progress of project.

12. Standard

A standard is an important element of plan. It is a norm against which performance is compared and evaluated. Terry defines it as "a unit of measurement established to serve as a criterion or level of reference. A standard forms the basis of controlling and serves as guide for performance. It brings uniformity in work. Standards assist in settling disputes because they may serve as base levels.

They are essential in planning schedules and determining the proper use of resources. Qualitative and quantitative standards are set in various areas of business such as cost standards, quality standards, product standards, material standards, performance standards etc.

6.6 Summary

Planning is a particular type of decision making that addresses the specific future that managers desire for their organization. Planning is the first of the four major activities of the management process; planning, organizing, leading and controlling. We might think of planning as locomotive that drives a train of organizing, leading and controlling activities. Planning is not a single event, with a clear beginning and end. It is an ongoing process which reflects and adapts to changes in environment surrounding each organization. In organization planning is the process of setting goals and choosing means to achieve these goals for which different tools and techniques are available and used. In order to formulate accurate plans, managers have to predict the prospective changes in behavior of various related factors in future. This can be effectively done by making suitable forecasts using appropriate forecasting techniques.

6.7 Self Assessment Questions

1. Define planning. Discuss various steps involved in planning process.
2. Describe different types of plans and arrange them in hierarchy form.
3. What do you mean by forecasting? How is it related to planning?
4. Discuss various forecasting techniques.
5. "Forecasts are estimates of future condition". Comment on importance of furcating.
6. What is planning? Explain different planning techniques.
7. How planning differ from forecasting?
8. What is MBO? Describe the process of MBO.
9. Discuss Linear Programming as a planning technique for optimum allocation of resources.

6.8 Reference Books

- Prasad L M (2005), "Principles and Practice of Management", Sultan Chand & Sons, New Delhi.
- Koontz H and Weihrich H (2004), "Essentials of Management", Tata McGraw Hill, New Delhi.
- Sudha G S (2000), "Business Management", RBSA, Jaipur.
- Chhabra T N (1988), "Principles and Practice of Management", Dhanpan Rai & Sons, Delhi.
- Sherlekar S A and Sherlekar V S (2003), "Principles of Business Management", Himalaya Publishing House, Mumbai.
- Bhushan Y K (1998), "Fundamentals of Business Organisation and Management", Sultan Chand & Sons, New Delhi.
- Stoner J A F, Freeman R E and Gilbert Jr. D R (2001), "Management", PHI, New Delhi.