

COURSE TITLE: INDUSTRIAL MANAGEMENT AND ENTREPRENEURSHIP

COURSE CODE: Hu-601

Semester- VI

BRANCH: ELECTRICAL /MECHANICAL /CIVIL ENGINEERING

TOTAL DURATION -42 Hours

Chapter No.	Chapter Title	Content	Duration(in hours)
1.0	Introduction to Management	i) Meaning and Concept ii) Functions of Management iii) Principles of Management	3

MEANING AND CONCEPT OF MANAGEMENT

Managing is essential in all organized co-operation, as well as at all levels of organization in an enterprise. It is the function performed not only by corporation President and the army general but also of the shop supervisors and the company commander. Managing is equally important in business as well as non business organizations. During the last few decades, Management as a discipline has attracted the attention of academicians and practitioners to a very great extent. The basic reason behind this phenomenon is the growing importance of management in day to day life of the people.

Because of the divergent views, it is very difficult to give a precise definition to the term “Management”. It has drawn concepts and Principles from economics, sociology, psychology, anthropology, history, and statistics and so on. The result is that each group of contributors has treated Management differently. Management is invariably defined as the process of “getting things done through the effort of others”, getting from where we are to where we want to be with the least expenditure of time, money and efforts, or co-ordinating individual and group efforts, or co-ordinating individual and group efforts towards super-ordinate goals.

Many management experts have tried to define management. But, no definition of management has been universally accepted. Let us discuss some of the leading definitions of management:

Peter F. Drucker defines, "management is an organ; organs can be described and defined only through their functions".

According to Terry, "Management is not people; it is an activity like walking, reading, swimming or running. People who perform Management can be designated as members, members of Management or executive leaders."

Ralph C. Davis has defined Management as, "Management is the function of executive leadership anywhere."

According to Mc Farland, "Management is defined for conceptual, theoretical and analytical purposes as that process by which managers create, direct, maintain and operate purposive organization through systematic, co-ordinated co-operative human effort."

Henry Fayol, "To manage is to forecast and plan, to organize, to compound, to co-ordinate and to control."

Harold Koontz defines management in a very simple form where he states that "Management is the art of getting things done through and with the people in formally organized groups."

Dalton E. McFarland defines Management as "Management is defined for conceptual, theoretical and analytical purposes as that process by which Managers create direct, maintain and operate purposive organization through systematic co-ordinated co-operative human effort."

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. Henry Fayol strongly felt that managers should be guided by certain principles while giving the management principles, Fayol has emphasised two things.

1. The list of management principles is not exhaustive but suggestive and has discussed only those principles which he followed on most occasions.

2. Principles of management are not rigid but flexible.

Fayol evolved 14 general principles of management which are still considered important in management. These are:

1. Division of work:

This principle suggests that work should be assigned to a person for which he is best suited. Work should be divided up to that stage where it is optimum and just. This division of work can be applied at all levels of the organization. Fayol has advocated division of work to take the advantages of specialization

2. Authority and responsibility:

Responsibility means the work assigned to any person, and authority means rights that are given to him to perform that work. It is necessary that adequate authority should be given to discharge the responsibility. Authority includes official authority and personal authority. Official authority is derived from the manager's position and personal authority is derived from the personal qualities. In order to discharge the responsibility properly, there should be parity of authority and responsibility.

3. Discipline:

This principle emphasizes that subordinates should respect their superiors and obey their orders. On the other hand, superior's behavior should be such that they make subordinates obedient. If such discipline is observed, there will be no problem of industrial disputes. Discipline is obedience, application, energy, behavior 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 recognized authority.

4. Unity of command:

Subordinates should receive orders from one superior only. If he receives orders from more than one person, he can satisfy none. The more completely an individual has a reporting relationship to a single superior, the less is the problem of conflict in instructions and the greatest is the feeling of personal responsibility for results. Fayol has considered unity of command as an important aspect in managing an organization.

5. Unity of Direction:

Each group of activities having the same objective must have one head and one plan. In the absence of this principle, there may be wastage, over expenditure and useless rivalry in the same organisation. Unity of direction is different from Unity of command in the sense that former is concerned with functioning of the organization in respect of its grouping its activities or planning while later is concerned with personnel at all levels in the organization in terms of reporting relationship.

6. Subordination of individual to general interest:

While taking any decision, the general interest, i.e., the interest of the organization as a whole should be preferred to individual interests. Individual interest must be subordinate to general interest when there is a conflict between the two. Superiors should set an example in fairness and goodness.

7. Remuneration:

Management should try to give fair wages to the employees and employees should have the satisfaction of being rightly paid. Remuneration must give satisfaction to both the employers and employees.

8. Centralization:

Everything which goes to increase the importance of subordinate's role is decentralization and everything which goes to reduce it is centralization. When a single person controls the affairs of an organization, it is said to be complete centralisation. In small concerns, a single manager can supervise the work of the subordinates easily, while in a big organization, control is divided among a number of persons. Thus centralization is more in small concerns and

it is less in big concerns. Fayol's opinion was that the degree of centralization should be fixed on the basis of capabilities of the persons.

9. Scalar Chain:

This is the chain of superiors from the highest to the lowest ranks. The order of this chain should be maintained when some instructions are to be passed on or enquiries are to be made. 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 organization. For this purpose, Fayol has suggested gang plank which is used to prevent the scalar chain from bogging down action.

10. Order:

This is a principle relating to the arrangement of things and people. In material order, there should be a place for everything and everything should be in its place. In social order, there should be right man in the right place. Placement of men and materials should be properly made. Proper space should be made available where materials can be kept safely. Each man should be provided the work for which he is best suited.

11. Equity:

This principle requires the managers to be kind and just so that loyalty can be won from the subordinates. Equity is a combination of justice and kindness. The application of equity requires good sense, experience, and good nature for soliciting loyalty and devotion from subordinates.

12. Stability of Tenure:

Employees should be selected on the principles of stability of employment. They should be given necessary training so that they become perfect. There should not be frequent termination of employees. Stability of tenure is essential to get an employee accustomed to new work and succeeding in doing it well.

13. Initiative:

Within the limits of authority and discipline, managers would 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. Managers should infuse the spirit of team work in their subordinates.

Fayol made it clear that these principles can be applied to most organizations, but these are not absolute principles. Organizations are at liberty to adopt those which suit them or to delete a few according to their needs.

MANAGEMENT FUNCTIONS /PROCESS OF MANAGEMENT

There is enough disagreement among management writers on the classification of managerial functions. Newman and Summer recognize only four functions, namely, organizing, planning, leading and controlling.

Henry Fayol identifies five functions of management, viz. planning, organizing, commanding, coordinating and controlling. Luther Gulick states seven such functions under the catch word "POSDCORB" which stands for planning, organizing, staffing, directing, coordinating, reporting and budgeting. Warren Haynes and Joseph Massie classify management functions into decision-making, organizing, staffing, planning, controlling, communicating and directing. Koontz and O'Donnell divide these functions into planning organizing, staffing, directing and controlling.

For our purpose, we shall designate the following six as the functions of a manager: planning, organizing, staffing, directing, coordinating and controlling.

1. Planning:

Planning is the most fundamental and the most pervasive of all management functions. If people working in groups have to perform effectively, they should know in advance what is to be

done, what activities they have to perform in order to do what is to be done, and when it is to be done. Planning is concerned with 'what', 'how, and 'when' of performance. It is deciding in the present about the future objectives and the courses of action for their achievement. It thus involves:

- a. Determination of long and short-range objectives;
- b. Development of strategies and courses of actions to be followed for the achievement of these objectives; and
- c. Formulation of policies, procedures, and rules, etc., for the implementation of strategies, and plans.

The organizational objectives are set by top management in the context of its basic purpose and mission, environmental factors, business forecasts, and available and potential resources. These objectives are both long-range as well as short-range. They are divided into divisional, departmental, sectional and individual objectives or goals. This is followed by the development of strategies and courses of action to be followed at various levels of management and in various segments of the organization. Policies, procedures and rules provide the framework of decision making, and the method and order for the making and implementation of these decisions.

Every manager performs all these planning functions, or contributes to their performance. In some organizations, particularly those which are traditionally managed and the small ones, planning are often not done deliberately and systematically but it is still done. The plans may be in the minds of their managers rather than explicitly and precisely spelt out: they may be fuzzy rather than clear but they are always there. Planning is thus the most basic function of management. It is performed in all kinds of organizations by all managers at all levels of hierarchy.

2. Organizing :

Organizing involves identification of activities required for the achievement of enterprise objectives and implementation of plans; grouping of activities into jobs; assignment of these jobs and activities to departments and individuals; delegation of responsibility and authority for performance, and provision for vertical and horizontal coordination of activities. Every manager

has to decide what activities have to be undertaken in his department or section for the achievement of the goals entrusted to him. Having identified the activities, he has to group identical or similar activities in order to make jobs, assign these jobs or groups of activities to his subordinates, delegate authority to them so as to enable them to make decisions and initiate action for undertaking these activities, and provide for coordination between himself and his subordinates, and among his subordinates. Organizing thus involves the following sub-functions:

- a. Identification of activities required for the achievement of objectives and implementation of plans.
- b. Grouping the activities so as to create self-contained jobs.
- c. Assignment of jobs to employees.
- d. Delegation of authority so as to enable them to perform their jobs and to command the resources needed for their performance.
- e. Establishment of a network of coordinating relationships.

Organizing process results in a structure of the organization. It comprises organizational positions, accompanying tasks and responsibilities, and a network of roles and authority-responsibility relationships.

Organizing is thus the basic process of combining and integrating human, physical and financial resources in productive interrelationships for the achievement of enterprise objectives. It aims at combining employees and interrelated tasks in an orderly manner so that organizational work is performed in a coordinated manner, and all efforts and activities pull together in the direction of organizational goals.

3. Staffing :

Staffing is a continuous and vital function of management. After the objectives have been determined, strategies, policies, programmes, procedures and rules formulated for their achievement, activities for the implementation of strategies, policies, programmes, etc. identified and grouped into jobs, the next logical step in the management process is to procure suitable personnel for manning the jobs. Since the efficiency and effectiveness of an organization significantly depends on the quality of its personnel and since it is one of the primary functions

of management to achieve qualified and trained people to fill various positions, staffing has been recognized as a distinct function of management. It comprises several sub functions:

- a. Manpower planning involving determination of the number and the kind of personnel required.
- b. Recruitment for attracting adequate number of potential employees to seek jobs in the enterprise.
- c. Selection of the most suitable persons for the jobs under consideration.
- d. Placement, induction and orientation.
- e. Transfers, promotions, termination and layoff.
- f. Training and development of employees.

As the importance of human factor in organizational effectiveness is being increasingly recognized, staffing is gaining acceptance as a distinct function of management. It need hardly any emphasize that no organization can ever be better than its people, and managers must perform the staffing function with as much concern as any other function.

4. Directing :

Directing is the function of leading the employees to perform efficiently, and contribute their optimum to the achievement of organizational objectives. Jobs assigned to subordinates have to be explained and clarified, they have to be provided guidance in job performance and they are to be motivated to contribute their optimum performance with zeal and enthusiasm. The function of directing thus involves the following sub-functions:

- a. Communication
- b. Motivation
- c. Leadership

5. Coordination:

Coordinating is the function of establishing such relationships among various parts of the organization that they all together pull in the direction of organizational objectives. It is thus the process of tying together all the organizational decisions, operations, activities and efforts so as to achieve unity of action for the accomplishment of organizational objectives.

The significance of the coordinating process has been aptly highlighted by Mary Parker Follet. The manager, in her view, should ensure that he has an organization "with all its parts coordinated, so moving together in their closely knit and adjusting activities, so linking, interlocking and interrelation, that they make a working unit, which is not a congeries of separate pieces, but what I have called a functional whole or integrative unity". Coordination, as a management function, involves the following sub-functions:

- a. Clear definition of authority-responsibility relationships
- b. Unity of direction
- c. Unity of command
- d. Effective communication
- e. Effective leadership

6. Controlling:

Controlling is the function of ensuring that the divisional, departmental, sectional and individual performances are consistent with the predetermined objectives and goals. Deviations from objectives and plans have to be identified and investigated, and correction action taken. Deviations from plans and objectives provide feedback to managers, and all other management processes including planning, organizing, staffing, directing and coordinating are continuously reviewed and modified, where necessary.

Controlling implies that objectives, goals and standards of performance exist and are known to employees and their superiors. It also implies a flexible and dynamic organization which will permit changes in objectives, plans, programmes, strategies, policies, organizational design, staffing policies and practices, leadership style, communication system, etc., for it is not uncommon that employees failure to achieve predetermined standards is due to defects or shortcomings in any one or more of the above dimensions of management.

Thus, controlling involves the following process:

- (a) Measurement of performance against predetermined goals.
- (b) Identification of deviations from these goals.
- (c) Corrective action to rectify deviations.

It may be pointed out that although management functions have been discussed in a particular sequence-planning, organizing, staffing, directing, coordinating and controlling – they are not performed in a sequential order. Management is an integral process and it is difficult to put its functions neatly in separate boxes. Management functions tend to coalesce, and it sometimes becomes difficult to separate one from the other. For example, when a production manager is discussing work problems with one of his subordinates, it is difficult to say whether he is guiding, developing or communicating, or doing all these things simultaneously. Moreover, managers often perform more than one function simultaneously.

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Chapter No.	Chapter Title	Content	Duration(in hours)
2.0	Leadership, Decision Making & Communication	<ul style="list-style-type: none"> i. Definition of Leader ii. Functions of a Leader iii. Decision Making – Definition iv. Decision Making Process v. Communication – Definition, Importance & Types 	4

DEFINITION OF LEADER

The word ‘leader’ stems from the root *leden* meaning ‘to travel’ or ‘show the way’. It has been derived from the verb “to lead.” This also implies “to advance,” “to expel,” “to stand out,” to guide and govern the actions of others. A leader is a person who leads a group of followers.

In the words of Keith Davis, “leadership is the ability to persuade others to seek defined objectives enthusiastically. It is the human factor that binds a group together and motivates it towards goals.”

In the words of Koontz O’ Donnell, “Leadership is the ability to exert interpersonal influence by means of communication towards the achievement of a goal.”

Leadership is defined by Paul Hersey and K.H. Blanchard as “the process of influencing group activities towards the accomplishment of goals in a given situation.”

According to Management Guru, Peter F: Drucker, “Leadership is the lifting of man’s visions to higher sights, the raising of a man’s performance to a higher standard, the building of a man’s personality beyond its normal limitations.”

FUNCTIONS OF A LEADER

1. The leader, as an executive, is a top coordinator of group activities and an overseer of the execution of policies.
2. The leader, as a planner, decides the ways and means by which the group achieves its both short-term and long-term ends through proper action and proper planning.
3. The leader, as a policy-maker, establishes the group goals and policies.
4. The leader, as an expert, is a source of information and skills.
5. The leader, as a representative is the official spokes-person for the group, the representative of the group and the channel for both outgoing and incoming communications.
6. The leader, as a controller of internal relations,; determines specific aspects of the group structure.
7. The leader, as purveyor of rewards and punishment, exercises controls over the group members by the power vested in him to give rewards and impose punishments.
8. The leader, as arbitrator and mediator, controls inter-personal conflict within the group.

Herbert G. Hicks refers to the following as the common leadership activities:

- 1. Arbitrating:** Often members disagree on the best decision for an organizational matter. An effective leader often will resolve such disagreement by arbitrating on making the decision on the course of action to be taken.
- 2. Suggesting:** Suggestions are often employed by an adroit leader for a long-term. Suggestion is likely to be a powerful tool in the manager's kit.
- 3. Fixing objectives:** A manager often personally fixes the objectives for his organization. He must see to it that the organization has always specific and suitable objectives before it.
- 4. Catalyzing:** In organizations some force is required to start or accelerate their movement. A leader is expected to be a catalyser and provide such a force.

5. Providing security: In organizations the personal security of followers is very important. A true leader can provide a large measure of security by maintaining a positive and optimistic attitude towards them even in the face of adversities.

6. Representing: A leader is usually treated as the representative of his organization.

7. Inspiring: In organization many persons work more productively in organizations when their leader makes them feel that the work they do is worthwhile and important.

DECISION MAKING – DEFINITION

Decision Making is the essence of the management process. Decisions are made to solve problems, tackling the situations, handling crises and resolving conflicts that are inevitable. Decision Making is at the core of planning.

The Concept of decision making involves defining the problem, finding, comparing and choosing a course of action. It is a process or activity of choosing an appropriate course of action from several alternative courses. The term “decision making” has been defined as a process of judging various available options and narrowing down choices to a situation one. Decision making is a conscious and human process involving both individual and social phenomena based on factual and value premises which concludes with a choice of one behavioral activity from among one or more alternatives with the intention of moving towards a desired state of affairs.”

Nickell, Rice and Tucker (1986) defined, “Decision Making as the process of selecting from alternative courses of action.”

Terry (2009), “Decision Making is the selection based on some criteria from two or more possible alternatives.”

DECISION MAKING PROCESS

Most models of decision making include six essential steps that it is recommended managers should follow when making decisions.

1. Identify and diagnose the problem.

2. Identify alternative solutions.

3. Evaluate alternatives.

4. Choose an alternative.

5. Implement the decision.

6. Evaluate the decision

Step 1: Problem identification and diagnosis: The first stage of the decision-making process is recognising that a problem exists and that action has to be taken. A problem is a discrepancy between the current state of affairs and a desired state of affairs. Unless the problem is identified in precise terms, solutions are very difficult to find. In seeking to identify a problem, managers can use a variety of sources of data, including comparing organisational performance against historical performance, against the current performance of other organisations/departments or against future expected performance. Problem identification must be followed by a willingness to do something to rectify the situation. Before taking action the problem needs accurate diagnosis. Diagnosis involves assessing the true cause of the problem by carefully selecting all relevant material and discarding information which is not relevant to the problem at hand. Sometimes decisions need to be made when a problem does not exist: for example, a company might want to grow rapidly to capitalise on market opportunities and will have to decide on what route to take.

Step 2: Identification of alternatives: Having identified and diagnosed the problem, the next step for an organisation is to identify a range of alternatives to solve the problem. Managers should try to identify as many alternatives as possible in order to broaden options for the organisation. In generating alternatives the organisation may look toward ready-made solutions that have been tried before, or custom-made solutions that have to be designed specifically for the problem at hand. In today's business environment more and more organisations are applying custom-made solutions to enhance competitive advantage. Returning to the previous example of an organisation seeking growth opportunities, identifying all the alternatives is critically important when making a choice about a certain course of action.

Some of the alternatives open to the company are:

- growth through acquisition

- growth through establishing an overseas facility
- using an agent to market and distribute the product abroad
- growth through diversification of the existing product line.

With such a decision the organisation has to design its own individual custom-made solution. While the organisation might be guided by previous decisions it has taken, or by what competitors have done, this decision is unique and therefore requires new solutions.

Step 3: Evaluation of alternatives: Having identified the available alternatives, a manager needs to evaluate each alternative in order to choose the best one. Consideration should be given to the advantages and disadvantages as well as the costs and benefits associated with each option. Most alternatives will have positive and negative aspects and the manager will have to try to balance anticipated outcomes. Depending on the situation, evaluation of alternatives may be intuitive (based on gut feeling) or based on scientific analysis. Most organisations try to use a combination of both. When evaluating alternatives, managers may consider the potential consequences of alternatives under several different scenarios. In doing so they can develop contingency plans which can be implemented with possible future scenarios in mind. When evaluating the range of alternatives available to the organisation to handle growth, a number of different criteria can be applied. The organisation will consider the cost associated with each option as well as the time taken to complete each alternative. The chances of success of each of the options will also have to be considered, as will the impact of any decision on employees, training and culture.

Step 4: Choice of alternative: Having evaluated the various alternatives, the next step is to choose the most suitable one. If for some reason none of the options considered is suitable, the manager should revert back to Step 2 of the process and begin again. When there are suitable alternatives and Steps 2 and 3 have been conducted skilfully, selecting alternatives may be relatively easy. In practice, however, alternatives may not differ significantly in terms of their outcomes and therefore decisions will be a matter of judgement. In coming to a decision the manager will be confronted by many conflicting requirements that will have to be taken into account. For example, some trade-offs may involve quality versus acceptability of the decision, and political and resource constraints. Returning to our example, using the evaluative criteria in

Step 3 the organisation will make a decision about which alternative to choose for future growth. Based on an analysis of the market and the organisation's capabilities they decide to purchase a small company with a strong market presence in a geographical region presently unserved by the organisation.

Step 5: Implementation: Once the decision has been made it needs to be implemented. This stage of the process is critical to the success of the decision and is the key to effective decision making. The best alternative is worth nothing if it is not implemented properly. In order to successfully implement a decision, managers must ensure that those who are implementing it fully understand why the choice was made, why it is being implemented, and are fully committed to its success. Decisions often fail at the implementation stage because managers do not ensure that people understand the rationale behind the decision and that they are fully committed to it. For this reason many organisations are attempting to push decision making further down the organisation to ensure that employees feel some sense of ownership in the decisions that are made. To implement the decision to acquire another smaller business in a different country requires good conceptual skills and could prove challenging. In addition to legal and competitive issues the company will have to deal with assimilating aspects of the new business into their current operations.

Step 6: Evaluation: Once the decision is implemented, it needs to be evaluated to provide feedback. The process of evaluation should take place at all managerial levels. This step allows managers to see the results of the decision and to identify any adjustments that need to be executed. In almost all cases some form of adjustment will be made to ensure a more favourable outcome. Evaluation and feedback are not one-off activities, however, and they should form part of an ongoing process. As conditions change, decisions should be re-evaluated to ensure that they are still the most appropriate for the organisation. This also helps managers to learn about making sound decisions taking past experience into account. Evaluation of the acquisition of a new business will be measured on the success and profitability of the venture. As the primary goal of the decision was to increase growth opportunities, the organisation should carefully monitor growth rates. The organisation, having acquired a new business, will feed back its experiences into the next decision-making process with which it is faced.

COMMUNICATION – DEFINITION, IMPORTANCE & TYPES

Communication is the life blood of any organization and its main purpose is to effect change to influence action. In any organization the main problem is of maintaining effective communication process. The management problem generally results in poor communication. Serious mistakes are made because orders are misunderstood. The basic problem in communication is that the meaning which is actually understood may not be what the other intended to send. It must be realised that the speaker and the listener are two separate individuals having their own limitations and number of things may happen to distort the message that pass between them. When people within the organization communicate with each other, it is internal communication. They do so to work as a team and realise the common goals. It could be official or unofficial. Modes of internal communication include face-to-face and written communication. Memos, reports, office order, circular, fax, video conferencing, meeting etc. are the examples of internal communication. When people in the organization communicate with anyone outside the organization it is called external communication. These people may be clients or customers, dealers or distributors, media, government, general public etc. are the examples of external communication.

DEFINITION OF COMMUNICATION

Communication in simple terms is a transfer of information between people, resulting in common understanding between them. Communication has been defined differently by different writers and behavioral theorists. Some popular definitions are –

According to Newman and summer, “Communication is an exchange of facts, ideas, opinions or emotions by two or more persons.”

According to Allen Louis, “It is the sum of all the things one person does when he wants to create an understanding in the mind of another.”

Hoben defines communication as “The verbal interchange of thoughts or ideas.”

In the words of Anderson, “Communication is the process by which we understand others and in turn endeavor to be understood by them. It is dynamic, constantly changing and shifting in response to the total situation.”

CHARACTERISTICS OF COMMUNICATION

Communication has the following characteristics –

It is Unavoidable – It is impossible to not communicate, since we communicate unintentionally all the time, even without the use of words. Our body language, the way we dress, the importance we give to arriving on time, our behavior and the physical environment in which we work, all convey certain messages to others.

It is a Two-way Exchange of Information – Communication is sharing of information between two or more persons, with continuous feedback.

It is a Process – Each message is part of a process and does not occur in isolation. This means that the meaning attached to a message depends on what has happened before and on the present context. For example, your boss's response to your request for a promotion will depend on your past relationship with him, as well as his mood at that particular moment.

It involves a Sender and a Receiver of Information – Any communication starts with a sender of a message and requires a receiver to attach some meaning to that message.

It could be Verbal or Non-verbal – Communication could be through the use of words in spoken or written form, or through the use of body language such as gestures and facial expressions.

IMPORTANCE OF COMMUNICATION

Good communication has many advantages for a business: strong communication:

- Motivates employees – helps them feel part of the business.
- Easier to control and coordinate business activity – prevents different parts of the business going in opposite directions
- Makes successful decision making easier for managers– decisions are based on more complete and accurate information
- Better communication with customers will increase sales
- Improve relationships with suppliers and possibly lead to more reliable delivery

Improves chances of obtaining finance – e.g. keeping the bank up-to-date about how the business is doing.

Communication is to an organisation what the nervous system is to the human body. Effective Communication will lead to the smooth working of any organisation. The following points illustrate the importance of Communication in Business

- Smooth Working of a Business Firm
- Basis of Managerial Function
- Maximum Production and Minimum Cost
- Prompt Decision and its Implementation
- Building Human Relations
- Job Satisfaction and Good Morale
- Avoids Illusion
- Contacts with external Parties.

TYPES OF COMMUNICATION

Communication may be divided into two areas – verbal and non-verbal communication.

Verbal communication, or communication through words, provides the opportunity for personal contact and two-way flow of information. A large part of our communication, whether at work or outside, is verbal in nature.

Verbal communication in turn, may be divided into two areas – oral and written communication. Oral communication may be defined as a process whereby a speaker interacts verbally with one or more listeners, in order to influence the latter's behavior in some way or the other.

Oral communication in a business context can take the form of meetings, presentations, one-to-one meetings, performance reviews and so on.

Written communication is a process whereby a writer interacts verbally with a receiver, in order to influence the latter's behavior. Written communication at the workplace can take several forms such as letters, memos, circulars, notices, reports and email.

Non-verbal communication, on the other hand may be defined as communication without words. It refers to any way of conveying meanings without the use of verbal language. Gestures, facial expressions, posture and the way we dress, are all part of non-verbal communication.

Communication can be either vertical or downward when considering the flow. Communication that moves in both directions – upwards and downwards is termed as Vertical Communication and communication that moves in lateral direction is termed as Horizontal Communication. Communication can be classified as follows:

- Downward Communication
- Upward Communication
- Horizontal Communication
- Diagonal Communication

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Chapter No.	Chapter Title	Content	Duration(in hours)
3.0	Introduction to Cost	i) Definition and Classification of Cost ii) Elements of Cost iii) Break Even Analysis	3

DEFINITION AND CLASSIFICATION OF COST

Cost is defined as the monetary valuation of effort, material, resources, time consumed, risk and opportunity forgone in production / delivery of a good or service. It is simply put as the amount that has to be paid or given up for something to be acquired.

In business and accounting, cost is the monetary value that a company has spent in order to produce something

Cost denotes the amount of money that a company spends on the creation or production of goods or services. It does not include the markup for profit.

From a seller's point of view, cost is the amount of money that is spent to produce a good or product. If a producer were to sell his products at the production price, his costs and income would break even, meaning that he would not lose money on the sales. However, he would not make a profit.

From a buyer's point of view the cost of a product is also known as the price. This is the amount that the seller charges for a product, and it includes both the production cost and the mark-up, which is added by the seller in order to make a profit.

1. Classification by Nature

This is the analytical classification of costs. Basically there are three broad categories as per this classification, namely Labor Cost, Materials Cost and Expenses. These heads make it easier to classify the costs in a cost sheet. They help ascertain the total cost and determine the cost of the work-in-progress.

1. **Material Costs:** Material costs are the costs of any materials we use in the production of goods. We divide these costs further. For example, let's divide material costs into raw material costs, spare parts, costs of packaging material etc.
2. **Labor Costs:** Labor costs consists of the salary and wages paid to permanent and temporary employees in the pursuit of the manufacturing of the goods
3. **Expenses:** All other expenses associated with making and selling the goods or services.

2. Classification by Functions

This is the functional classification of costs. So the classification follows the pattern of basic managerial activities of the organization.

The grouping of costs is according to the broad divisions of functions such as production, administration, selling etc.

- **Production Costs:** All costs concerned with actual manufacturing or construction of the goods
- **Commercial Costs:** Total costs of the operation of an enterprise other than the manufacturing costs. It includes the admin costs, selling and distribution costs etc.

3. Classification by Traceability

This aspect one of the most important classification of costs, into direct costs and indirect costs. This classification is based on the degree of traceability to the final product of the firm.

- **Direct Costs:** So these are the costs which are easily identified with a specific cost unit or cost centers. Some of the most basic examples are the materials used in the manufacturing of a product or the labor involved with the production process.
- **Indirect Costs:** These costs are incurred for many purposes, i.e. between many cost centers or units. So we cannot easily identify them to one particular cost center. Take for example the rent of the building or the salary of the manager. We will not be able to accurately determine how to ascertain such costs to a particular cost unit.

4. Classification by Normality

This classification determines the costs as normal costs and abnormal costs. The norms of normal costs are the costs that usually occur at a given level of output, under the same set of conditions in which this level of output happens.

- **Normal Costs:** This is a part of the cost of production and a part of the costing profit and loss. These are the costs that the firm incurs at the normal level of output in standard conditions.
- **Abnormal Costs:** These costs are not normally incurred at a given level of output in conditions in which normal levels of output occur. These costs are charged to the profit and loss account, they are not a part of the cost of production.

ELEMENTS OF COST

The elements of cost are those elements which constitute the cost of manufacture of a product. We can broadly divide these elements of cost into three categories. In a manufacturing organization, we convert raw materials into a finished product with the help of labor and other services. These services are Material, Labour and Expenses.

A cost is composed of three elements – Material, Labour and Expenses. Each of these three elements can be direct and indirect, i.e., direct materials and indirect materials, direct labour and indirect labour, direct expenses and indirect expenses.

1. Direct Material

It represents the raw material or goods necessary to produce or manufacture a product. The cost of direct material varies according to the level of output. For example, Milk is the direct material of ghee.

2. Indirect Material

It refers to the material which we require to produce a product but is not directly identifiable. It does not form a part of a finished product. For example, the use of nails to make a table. The cost of indirect material does not vary in the direct proportion of product.

3. Direct Labour

It refers to the amount which paid to the workers who are directly engaged in the production of goods. It varies directly with the level of output.

4. Indirect Labour

It represents the amount paid to workers who are indirectly engaged in the production of goods. It does not vary directly with the level of output.

5. Direct Expenses

It refers to the expenses that are specifically incurred by the enterprises to produce a product. The production cannot take place without incurring these expenses. It varies directly with the level of production.

6. Indirect Expenses

It represents the expenses that are incurred by the organization to produce a product. These expenses cannot be easily identified accurately. For example, Power expenses for the production of pens.

7. Overhead

It refers to all indirect materials, indirect labour, and an indirect expense.

8. Factory Overhead

Factory overhead or Production Overhead or Works Overhead refers to the expenses which a firm incurs in the production area or within factory premises.

Indirect material, rent, rates and taxes of factory, canteen expenses etc. are examples of factory overhead.

9. Administration Overhead

Administrative or Office Overhead refers to the expenses which are incurred in connection with the general administration of the organizations.

Salary of administrative staff, postage, telegram and telephone, stationery etc. are examples of administration overhead.

10. Selling Overhead

All expenses that a firm incurs in connection with sales are selling overheads. Salary of sales department staff, travelers' commission, advertisement etc. is an example of selling overhead.

BREAK EVEN ANALYSIS

Break-even analysis is of vital importance in determining the practical application of cost functions. It is a function of three factors, i.e. sales volume, cost and profit. It aims at classifying the dynamic relationship existing between total cost and sale volume of a company.

Hence it is also known as "cost-volume-profit analysis". It helps to know the operating condition that exists when a company 'breaks-even', that is when sales reach a point equal to all expenses incurred in attaining that level of sales. The break-even point may be defined as that level of

sales in which total revenues equal total costs and net income is equal to zero. This is also known as no-profit no-loss point. This concept has been proved highly useful to the company executives in profit forecasting and planning and also in examining the effect of alternative business management decisions.

A Break-Even Analysis is a financial tool which helps you to determine at what stage your company, or a new service or a product, will be profitable. In other words, it's a financial calculation for determining the number of products or services a company should sell to cover its costs (particularly fixed costs).

Break-even is a situation where you are neither making money nor losing money, but all your costs have been covered.

Break-even analysis is useful in studying the relation between the variable cost, fixed cost and revenue. Generally, a company with low fixed costs will have a low break-even point of sale.

Components of Break Even Analysis

Fixed costs

Fixed costs are also called as the overhead cost. These overhead costs occur after the decision to start an economic activity is taken and these costs are directly related to the level of production, but not the quantity of production. Fixed costs include (but are not limited to) interest, taxes, salaries, rent, depreciation costs, labour costs, energy costs etc. These costs are fixed no matter how much you sell.

Variable costs

Variable costs are costs that will increase or decrease in direct relation to the production volume. These costs include cost of raw material, packaging cost, fuel and other costs that are directly related to the production.

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Chapter No.	Chapter Title	Content	Duration(in hours)
4.0	Human Resource Management	<ul style="list-style-type: none"> i) Meaning of Manpower Planning ii) Recruitment and Selection Procedure iii) Payment of Wages – Factors Determining The Wage iv) Methods of Payment of Wages – Time Rate And Piece Rate v) Labour Turnover – Definition, its Causes, Impact and Remedy 	5

MEANING OF MANPOWER PLANNING

Manpower planning is determination of right number and right skills of human force to suit present and future needs. Manpower planning is defined by Stainer “strategy for the requisition, utilization, improvement and preservation of an enterprise’s human resource. It relates to establishing job specifications or the quantitative requirements of jobs determining the number of personnel required and developing sources of manpower.” Manpower planning is a process determining requirements of right number and right kind of human force at right place and right time. Objectives of manpower planning are to ensure optimum use of human resources currently employed. To assess future skills requirement, to provide control measures to ensure that necessary resources are available as and when required, to determine requirement level, to anticipate redundancies and avoid unnecessary dismissals and assess training and development needs.

DEFINITION OF MANPOWER PLANNING

Coleman has defined human resources or manpower planning as “the process of determining manpower requirements and the means for meeting those requirements in order to carry out the integrated plan of the organization.

Manpower planning is the process including forecasting, developing and controlling by which a firm ensures that it has the right number of people at the right places at the right time doing-work for which they are economically most useful.

Manpower planning is the integration of manpower policies, practices and procedures so as to achieve the right number of the right people in the right jobs at the right time.

RECRUITMENT AND SELECTION PROCEDURE

Recruitment and Selection is an important operation in HRM, designed to maximize employee strength in order to meet the employer's strategic goals and objectives. In short, Recruitment and Selection is the process of sourcing, screening, shortlisting and selecting the right candidates for the filling the required vacant positions.

Recruitment is a process of identifying, screening, shortlisting and hiring potential resource for filling up the vacant positions in an organization. It is a core function of Human Resource Management. Recruitment is the process of choosing the right person for the right position and at the right time. Recruitment also refers to the process of attracting, selecting, and appointing potential candidates to meet the organization's resource requirements.

SOURCES OF RECRUITMENT

Recruitment means securing the services of certain persons for a certain job. The success or failure of employment is affected by the method of recruitment.

The main sources of recruitment are:

1. INTERNAL SOURCES

2. EXTERNAL SOURCES

INTERNAL SOURCES: This is the most important and most obvious source of recruitment. It means the person is already on the pay roll or the working force of the organization. He is chosen for a suitable post elsewhere in the same organization. Recruitment from internal sources may be found useful since the employer is in a better position to evaluate those presently employed than outside candidates.

The internal appointee and the organization are known to each other and hence tried and tested. Internal recruitment is usually less expensive since it reduces costs of advertising, recruitment, induction and training.

There are some disadvantages like:

1. The internal candidate may not be the best in the market.
2. It may be difficult to find the necessary manpower from within the organization especially when expansion is taking place and numerous vacancies are rapidly created.
3. Internal promotions may cause friction among existing staff.

THE EXTERNAL SOURCES:

This type of recruitment is done from outside. This may include new entrants, mostly young men, and experienced potential employees, with wide range of skills and abilities. Since persons are recruited from a large market, the best selection can be made without any distinctions of caste, sex or colour.

Recruitment from outside may cause conflict between the present employees and the new entrants leading to non co-operation. It is a time consuming and costly process.

The external sources are as follows

1. Media advertising
2. Friends and relatives
3. Government employment agencies
4. Private employment agencies
5. Campus interviews- school, colleges, universities technical institutes.
6. Labour unions.
7. Casual applicants.

Internal Sources: Internal sources of recruitment refer to hiring employees within the organization through:

- Promotions
- Transfers
- Former Employees
- Internal Advertisements (Job Posting)
- Employee Referrals
- Previous Applicants

External Sources:

External sources of recruitment refer to hiring employees outside the organization through:
Direct Recruitment

- Employment Exchanges
- Employment Agencies
- Advertisements
- Professional Associations
- Campus Recruitment

Procedure of Recruitment of Personnel:

Recruitment is marketing tool as well as a social relational exercise. While hiring people, the organisations are going out into their outside environment and facing cut throat competition with others for apt candidates. Therefore, it should be carried out in a manner that retains or increases the image and goodwill of organisation honest and objective recruitment policies and procedures would bring the image of the companies into the peak elevation of corporate world. There must be a definite and well defined procedure for making the selection of employees in the enterprise. The procedure of selection is the, series of steps through which the employees are finally selected for the enterprise. The selection procedure must be prepared in the manner that more and more information may be made available about the candidates so that the selection of best employees may be made. There cannot be any definite

selection procedure applicable to all enterprises. However, the common, steps of selection procedure are as follows:

1. Acceptance of Application Forms: First of all applications are invited from the prospective candidates. These applications may be invited through advertising the vacancies in News Paper, Magazine, Employment Exchange, School and Colleges, Training Centers, Labour Unions and other Educational Institutions etc. These applications may be invited on plain paper or on the prescribed forms which may be issued by the enterprise. The candidates are advised to give the relevant information in these application forms. These applications provide a record of qualification, experience etc., of the candidates.

2. Analysis of Application Forms: A date is declared as the last submitting the application forms. After this date all the applications received for a post and analyzed in detail. the applications which are incomplete or which do not meet the requirement of post are set aside and the applicants of remaining applications are further invited for different tests and interviews etc.

3. Conducting Employment test: The selected candidates, the basis of their applications are called for employment tests. These tests may be of the following types:

(i) Intelligence Tests: Intelligence tests are meant to measure the mental ability of an individual in terms of his memory, vocabulary, reasoning etc. these tests measure the power of understanding of the candidates. It is a very common test used in the selection procedure these days.

(ii) Personality Tests: Personality tests aim at testing the nature, habit, emotion, maturity and temperament of the candidates. These tests are helpful in deciding the spirit of groupies and feeling of mutual co-operation.

(iii) Aptitude Tests: Aptitude tests are the test which measures the capacity and potentiality for learning the skills required for the job. These tests are very helpful in forecasting the success of candidates on a particular job.

(iv) Job Tests: These tests measure the level of efficiency and skills of the candidates required for a particular job. For example, the candidates required for the posts of typist may

be asked to type some material. By this the speed test of typing and accuracy in typing may be judged.

(v)Interest Tests: These are designed to evaluate the likings and disliking of the candidates for different situations and different occupations. These tests are helpful in determining the jobs suitable to the individual candidates. Employment tests are becoming very popular device of making the selection of best candidates for different posts. These tests help in measuring certain factors of the personality of the candidates.

4. Interview: The candidate selected in employment tests are invited for interview. The main object of interview is to find out of whether an individual candidate is suitable for a particular job or not. Face to face interview is the most important step of the selection procedure. It helps in judging the personality, ability, capability and the temperament of the candidates. It also provides an opportunity to check the information given by the candidates in their application forms. It provides the opportunity to the enterprise to understand the candidates thoroughly. It also provides the opportunity to the candidates to understand the organization and the job. In this way, it is a process of two way communication.

5. Selection by the Supervisor: Candidates selected in the interview must be referred to the supervisor for final selection. If the supervisor feels satisfied, the candidates are selected. If the supervisor is a member of the interview board, this step of referring the candidates to the supervisor is not required.

6. Medical Examination: After making the selection of the candidates they are checked by a reliable doctor or by a board of doctors to check their health. The main object of medical examination is to check whether the selected candidates are physically capable or not to perform the required job. The candidates which are declared medically unfit are rejected.

7. Issue of Appointment Letters: The candidates, who are approved in the medical examination also, are issued the appointment letters. These appointment letters must contain all the necessary information relating to their posts, period of probation scale, terms of appointment etc. these letters must also mention the date by which the candidates should join the firm.

8. Arrangement of Training: Necessary arrangements are made for providing training to the selected candidates, if necessary. The nature of training and the period of training depend upon the nature job. Training increasing the efficiency and morale of the selected candidates.

9. Allotment of Work: When the employees are trained, the work is allotted. The allotment of work must be made keeping in view the capacity, the ability, the past experience and the taste of candidates. The main point to consider while making the allotment of work must be the ‘Right man for the right job and right job for the right man.’

10. Follow Up: After making the allotment of the work to the employees, it is followed up. Under this process, the supervisor checks whether the employees are doing their test work according to the instructions issued to them or not. If not, necessary instructions and directions are given to them.

SELECTION

Selection is the process of picking or choosing the right candidate, who is most suitable for a vacant job position in an organization. In others words, selection can also be explained as the process of interviewing the candidates and evaluating their qualities, which are required for a specific job and then choosing the suitable candidate for the position. The selection of a right applicant for a vacant position will be an asset to the organization, which will be helping the organization in reaching its objectives.

Importance of Selection:

Selection is an important process because hiring good resources can help increase the overall performance of the organization. In contrast, if there is bad hire with a bad selection process, then the work will be affected and the cost incurred for replacing that bad resource will be high. The purpose of selection is to choose the most suitable candidate, who can meet the requirements of the jobs in an organization, who will be a successful applicant. For meeting the goals of the organization, it is important to evaluate various attributes of each candidate such as their qualifications, skills, experiences, overall attitude, etc. In this process, the most suitable candidate is picked after the elimination of the candidates, who are not suitable for the vacant job. The organization has to follow a proper selection process or procedure, as a huge amount of

money is spent for hiring a right candidate for a position. If a selection is wrong, then the cost incurred in induction and training the wrong candidate will be a huge loss to the employer in terms of money, effort, and also time. Hence, selection is very important and the process should be perfect for the betterment of the organization.

A good selection process should comprise the following steps:

Employment Interview: Employment interview is a process in which one-on-one session is conducted with the applicant to know a candidate better. It helps the interviewer to discover the inner qualities of the applicant and helps in taking a right decision.

Checking References: Reference checking is a process of verifying the applicant's qualifications and experiences with the references provided by him. These reference checks help the interviewer understand the conduct, the attitude, and the behavior of the candidate as an individual and also as a professional.

Medical Examination: Medical examination is a process, in which the physical and the mental fitness of the applicants are checked to ensure that the candidates are capable of performing a job or not. This examination helps the organization in choosing the right candidates who are physically and mentally fit.

Final Selection: The final selection is the final process which proves that the applicant has qualified in all the rounds of the selection process and will be issued an appointment letter.

PAYMENT OF WAGES – FACTORS DETERMINING THE WAGE

Wages are a payment for the service of labour, whether physical or mental. Traditionally the remuneration paid to manual workers is known as Wages.

Wage is a monetary payment made by the employer to his employee for the work done or services rendered. It is a monetary compensation for the services rendered. A worker may be paid Rs. 100 per day or Rs. 4500 per month. This is wage payment. The worker gives his services and takes payment called wage payment. Industrial workers are paid remuneration for their services in terms of money called wage payment. Wages are usually paid in cash at the end of one day, one month or one week. Money wage is the monetary compensation or price paid by

the employer to his employee for the services rendered. Such compensation is also called wage or salary or reward given by an organization to a person in return to a work done.

Wages can broadly classified into three different types –

a) Living Wages

b) Minimum Wages

c) Fair Wages

FACTORS DETERMINING THE WAGE

The eight factors influencing the determination of wage rates are as follows:

- 1. Ability to Pay**
- 2. Demand and Supply**
- 3. Prevailing Market Rates**
- 4. Cost of Living**
- 5. Bargaining of Trade Unions**
- 6. Productivity**
- 7. Government Regulations**
- 8. Cost of Training.**

The wage payment is an important factor influencing labour and management relations. Workers are very much concerned with the rates of wages as their standard of living is connected with the amount of remuneration they get. Managements, generally, do not come forward to pay higher wages because cost of production will go up and profits will decrease to the extent.

Following factors influence the determination of wage rate:

1. Ability to Pay:

The ability of an industry to pay will influence wage rate to be paid, if the concern is running into losses, then it may not be able to pay higher wage rates. A profitable enterprise may pay more to attract good workers. During the period of prosperity, workers are paid higher wages because management wants to share the profits with labour.

2. Demand and Supply:

The labour market conditions or demand and supply forces to operate at the national and local levels and determine the wage rates. When the demand for a particular type of skilled labour is more and supply is less than the wages will be more. On the other hand, if supply is more demand on the other hand, is less then persons will be available at lower wage rates also.

According to Mescon,” the supply and demand compensation criterion is very closely related to the prevailing pay comparable wage and on-going wage concepts since, in essence to all these remuneration standards are determined by immediate market forces and factors.

3. Prevailing Market Rates:

No enterprise can ignore prevailing wage rates. The wage rates paid in the industry or other concerns at the same place will form a base for fixing wage rates. If a unit or concern pays low rates then workers leave their jobs whenever they get a job somewhere else. It will not be possible to retain good workers for long periods.

4. Cost of Living:

In many industries wages are linked to enterprise cost of living which ensures a fair wages to workers. The wage rates are directly influenced by cost of living of a place. The workers will accept a wage which may ensure them a minimum standard of living.

Wages will also be adjusted according to price index number. The increase in price index will erode the purchasing power of workers and they will demand higher wages. When the prices are stable, then frequent wage increases may not be required

5. Bargaining of Trade Unions:

The wage rates are also influenced by the bargaining power of trade unions. Stronger the trade union, higher will be the wage rates. The strength of a trade union is judged by its membership, financial position and type of leadership.

6. Productivity:

Productivity is the contribution of the workers in order to increase output. It also measures the contribution of other factors of production like machines, materials, and management. Wage increase is sometimes associated with increase in productivity. Workers may also be offered additional bonus, etc., if productivity increases beyond a certain level. It is common practice to issue productivity bonus in industrial units.

7. Government Regulations:

To improve the working conditions of workers, government may pass a legislation for fixing minimum wages of workers. This may ensure them, a minimum level of living. In under developed countries bargaining power of labour is weak and employers try to exploit workers by paying them low wages. In India, Minimum Wages Act, 1948 was passed empower government to fix minimum wages of workers. Similarly, many other important legislation passed by government help to improve the wage structure.

8. Cost of Training:

In determining, the wages of the workers, in different occupations, allowances must be made for all the exercises incurred on training and time devoted for it.

METHODS OF PAYMENT OF WAGES – TIME RATE AND PIECE RATE

A) TIME RATE SYSTEM

B) PIECE RATE SYSTEM

Time rate system: It is the oldest and simplest method of wage payment used extensively in the industrial as well as government departments. Wages are paid as per the time spent by the workers in the factory. The production given by them is not taken into consideration. The employer buys the hours of the workers and pays them accordingly. Time rate system is also called as day wage system. In the time rate system, efficiency, sincerity, ability is not given attention and all the workers are paid at one and the same rate as per the period spent in the factory.

Advantages of time rate system:

- 1) Easy and simple: Time rate is easy to understand and simple to follow and calculate. Wage calculations are also easy and quick. Each worker knows how much wage payment he is entitled to at the end of the month. This gives convenience to employer and employees.
- 2) Guarantee of minimum wage: It gives the guarantee of certain minimum wage payment to every worker irrespective of their working capacity. Workers get a regular and stable income and this gives a sense of security to all workers as regards wage payment.
- 3) Maintains quality of production: Quality of production is maintained here as the workers are not in a hurry to complete the work. They do not rush the job and spoil the quality because of the temptation to earn more. Workers tend to work slowly and with care. Even accidents are less as workers use the machines in a careful manner.
- 4) Support from trade unions: Workers and trade unions accept and support time rate system as all workers are placed in one category as regards wage payment. This ensures unity among workers. Trade unions normally prefer time rate system of wage payment.
- 5) Avoids quarrels among workers: Time rate avoids heart burning and quarrels among the workers as uniform wages are paid to all. Here efficiency, honesty and sincerity of workers are not given any special weightage. Wage rate is the same for sincere and lazy workers.

Disadvantages of time rate system:

- 1) Not scientific: Time rate is not scientific system of wage payment as there is no direct linking between wages and production/productivity. Wages bill may increase without corresponding increase in the production. This will bring loss to the employer / management.
- 2) Absence of positive encouragement: In the time rate system, there is no positive encouragement to workers to improve their efficiency/ performance as the wage rate is uniform to all workers; efficient and inefficient.
- 3) No distinction between workers: In the time rate system no distinction is made between efficient and lazy workers, both are paid at one rate which is unfair. This system gives

punishment to sincere and efficient workers. They are discouraged as they are paid less than what they deserve. They may even leave the job.

4) No initiative to workers: Time rate fails to encourage workers to take more interest and initiative in their work. In fact, it encourages them to follow —go slow policy. This is because wage payment is not linked with the production given.

5) Labour cost may increase: In the time rate system, there is a possibility of increase in the labour cost without corresponding increase in the production. Workers may work with slow speed, give less production but collect the wage as per time or day fixed.

Piece rate system: This is another basic system of wage payment. It is just opposite to the time rate. It is also treated as an incentive wage system as it encourages workers to produce more and also to earn more. In the piece rate system, wages are paid as per the output or production given by the worker and not as per the time spent by the worker in the factory. Payment is by results in terms of output given. Wage rate is fixed per piece of work or for certain quantity of production. The production given by a worker at the end of the day is counted and payment is made accordingly.

Merits/ advantages of piece rate system:

1) Linking of wages with production: Here wages are linked with production or productivity. It raises the productivity of labour. Workers work with speed and use their capacity fully as the wage payment is directly related to the quantity of production given by a worker.

2) Distinction is made between efficient and inefficient workers: Distinction is made between efficient and inefficient worker and full justice is done to efficient worker as he gets payment in proportion to the production given. Efficient workers support the piece rate system but it is not preferred by unskilled and inefficient workers. They get less payment under this method as their capacity to produce is less.

3) Encourages workers to take initiative in the work: Piece rate system encourages workers to take more interest and initiative in the work as every worker gets full reward of his efforts. There is direct efforts-reward relationship in the piece rate system.

4) Fair to employer and employees: This system is fair to employers as well as employees. The employees get income in proportion to production given by them and the employer gets production in proportion to the wage paid.

5) Incentive system: This system serves as the incentive system. Workers work efficiently and take interest in the work due to corresponding benefit/ reward in the form of higher wage payment.

Demerits/limitation of piece rate system

1. No guarantee of minimum wage payment: There is a guarantee of certain minimum wage payment to a worker. This may prove to be dangerous particularly to a newly recruited worker and workers who are below average.

2. Workers suffer even when they are not at fault: Sometimes workers suffer in wage payment even when they are not at fault. Due to power failure, etc they may not be able to give production and naturally they will not be eligible for wage payment even when they remain present in the factory for the whole day.

3. Complicated system: Piece rate system is complicated and difficult as it is difficult to understand by ordinary workers. Management will have to keep elaborate records of production given by each worker. Workers also make complaints as regards wage payment when they feel that due payment is not made to them.

4. Disturbs unity of workers: Piece rate affects the unity among workers as wage payment will not be uniform to all workers. This will lead to quarrel among workers. Trade unions oppose piece rate system on the ground that it will lead to rivalry among workers and destroy unity among them.

LABOUR TURNOVER – DEFINITION, ITS CAUSES, IMPACT AND REMEDY

Labour turnover involves accessions and separations of employees. Accessions means employment of workers, whereas separation involve termination of employment due to lay-offs, deaths, discharges, quits, etc.

Labour turnover refers to the rate at which employees leave employment. Labour turnover can be evaluated by relating the number of employees leaving their employment during a period of time to the total or average numbers employed in that period.

CAUSES OF LABOUR TURNOVER

Causes for labour turnover could be classified into two types. They are:

Unavoidable causes i.e., Natural causes, and Avoidable causes.

Unavoidable causes of labour turnover

Unavoidable causes are natural causes are not under the control of the management. Such causes normally include

- 1. Change of Locality**
- 2. Death, retirement etc., of workers.**
- 3. Transport or housing problem in the firm's locality.**
- 4. Unfit for the work.**
- 5. Misconduct of workers.**
- 6. Sickness, accident, etc., of workers.**
- 7. On account of personal betterment.**
- 8. Domestic matter like marriage, etc.**

Avoidable causes of Labour Turnover

Avoidable causes are the causes that are under the control of the management and are due to the personnel policy of the organization. Such causes are

- 1. Low wage rates and other allowances when compared to other concerns.**
- 2. Unhealthy and bad working conditions.**
- 3. Lack of job satisfaction due to faulty placement of workers.**
- 4. Heavy work load and long working hours.**
- 5. Absence of sound training programmes.**
- 6. Lack of proper promotion methods.**
- 7. Unsatisfactory medical and recreational facilities.**

8. No job security.

9. Ill treatment of management towards the employees.

10. Temporary Job.

Effects of Labour Turnover

Effects of Labour Turnover depend upon the rate of labour turnover. Labour Turnover cannot be eliminated completely. There must be some labour turnover on account of unavoidable causes like retirement, death, etc. But, high rate of labour turnover is always unhealthy for the organization due to following reasons:

1. Constant changes in the workforce will affect the continuity of work. As a result, the overall production may be reduced.
2. The amount spent on selection and training of workers leaving the job will go waste. Further, to fill up the vacancies, management has to spend money on selection and training of new workers. It increases the cost of production.
3. New recruit may need some time to learn the work and adjust himself with the new surroundings which may result in loss of productivity.
4. New recruit may need some time to learn the work and adjust himself with the new surroundings which may result in loss of productivity.

Measures to control Labour Turnover

All organizations expect to have a certain rate of labour turnover, which is considered normal to that industry and trade. But, when the rate of labour turnover is considered high, then every effort should be made to reduce it.

The following measures may be adopted to minimize the labour turnover.

- 1. Appointing right man on the right job.**
- 2. Fair and equal treatment of all workers throughout the organization.**
- 3. Improvement of working conditions.**
- 4. Provision of fair wages, allowances and other monetary benefits.**

- 5. Provision of proper training facilities to new as well as existing employees.**
- 6. Provision of medical facilities to protect employees from sickness.**
- 7. Provision of welfare activities.**
- 8. Allowing workers participation in the management.**
- 9. Adopting sound promotion and transfer policies.**

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Chapter No.	Chapter Title	Content	Duration(in hours)
5.0	Industrial Legislation	i. Need of Industrial legislation ii. Indian Factories Act – 1948 – Definition of Factory, main provisions regarding health, Safety and Welfare of Workers iii) Industrial Dispute Act – 1947 – Definition of Industrial dispute, Machineries for settlement of Industrial dispute in India	5

Meaning of Industrial Legislation:-

Industrial legalizations are the laws enacted by the Government to provide economic and social justice to the workers in industries. Generally these laws provide guidelines to the employers/industrialists in dealing with the matters of wages, wage incentives, facilitates for workers and the working conditions of labour.

According to Mr. V.V. Giri industrial legislation is “a provision for equitable distribution of profits and benefits emerging from industry, between industrialists and workers and affording protection to the workers against harmful effects to their health safety and morality.”

Industrial legislation helps both workers and management to know exactly about their rights, duties and obligations and also the liabilities. Industrial Legislation also known as Industrial Law relates to the laws governing industrial enterprises. These can include a wide range of legal topics, from employment laws to environmental concerns, contracts, industrial relations, and worker safety regulations.

Objectives:

The objectives of Industrial laws are:-

- i. To safeguard the workers against exploitation.
- ii. To maintain good relationship between employees and employers.

- iii. To provide and improve the welfare, amenities of workers.
- iv. To settle industrial disputes.

Need of Industrial Legislation:

- i. Improves industrial relation i.e. employee-employer relations and minimizes industrial disputes.
- ii. Prospects workers form exploitation by the employers or management
- iii. Helps workers in getting fair wages
- iv. Minimizes labour unrest
- v. Reduces conflicts and strikes etc.
- vi. Ensures job security for workers
- vii. Promotes welcome environment conditions in the industrial system
- viii. Fixes rest pauses and work hours etc.
- ix. Provides compensation to workers, who are victims of accidents.

Principles of Industrial legislation:

Industrial legislations based upon the following principles:

1. Social Justice
2. Social Equality/ Welfare
3. National Economy
4. International Uniformity

(1) Social justice:

The first step in establishing social justice is to protect those who can't protect themselves. Industrial laws provide social justice to the workers by ensuring suitable distribution of profits and benefits among the employer and employees. It also provides better working conditions in industry.

(2) Social equality/welfare:

Another objective of labour law is to ensure social welfare of workers. These laws help the employees to improve their social status i.e. material and morale of the workers by providing adequate wages and safety measures, ensuring appropriate working hours and health facilities.

(3) National economy:

National economy is another guiding principle of labour legislation. It ensures normal growth of industry for the development of nation. It increases the efficiency of workers and satisfies their needs. Thus efficient industry finally contributes a lot to improve national economy.

(4) International uniformity:

In attaining international uniformity International Labour Organization (I.L.O.) has played an important part. It aims at securing minimum standard on uniform basis in respect of all labour matters. Uniformity of standards can be maintained only by enforcing various industrial laws.

Indian Factories Act 1948:

There has been rise of large scale factory/ industry in India in the later half of nineteenth century. Major Moore, Inspector-in- Chief of the Bombay Cotton Department, in his Report in 1872-73 first of all raised the question for the provision of legislation to regulate the working condition in factories; the first Factories act was enacted in 1881.

Since then the act has been amended on many occasions. The Factories Act 1934 was passed replacing all the previous legislation in regard to factories. This act was drafted in the light of the recommendations of the Royal Commission on Labour. This Act has also been amended suitably from time to time.

The experience of working of the Factories Act, 1934 had revealed a number of defects and weakness which have hampered effective administration of the Act, and the need for wholesale revision of the act to extend its protective provisions to the large number of smaller industrial establishments was felt. Therefore, the Factories Act, 1948 consolidating and amending the law relating to labour in factories, was passed by the Constituent Assembly on August 28, 1948. The Act received the assent of Governor General of India on 23 September 1948 and came into force on April 1, 1949.

The **Factories Act, 1948** (Act No. 63 of 1948), as amended by the Factories (Amendment) Act, 1987 (Act 20 of 1987), serves to assist in formulating national policies in India with respect to occupational safety and health in factories and docks in India. It deals with various problems concerning safety, health, efficiency and well-being of the persons at work places.

Objective of Factories Act, 1948:

The main objectives of the Indian Factories Act, 1948 are to regulate the working conditions in factories, to regulate health, safety welfare, and annual leave and enact special provision in respect of young persons, women and children who work in the factories.

1. Working Hours:

According to the provision of working hours of adults, no adult worker shall be required or allowed to work in a factory for more than 48 hours in a week. There should be a weekly holiday.

2. Health:

For protecting the health of workers, the Act lays down that every factory shall be kept clean and all necessary precautions shall be taken in this regard. The factories should have proper drainage system, adequate lighting, ventilation, temperature etc.

Adequate arrangements for drinking water should be made. Sufficient latrine and urinals should be provided at convenient places. These should be easily accessible to workers and must be kept cleaned.

3. Safety:

In order to provide safety to the workers, the Act provides that the machinery should be fenced, no young person shall work at any dangerous machine, in confined spaces, there should be provision for manholes of adequate size so that in case of emergency the workers can escape.

4. Welfare:

For the welfare of the workers, the Act provides that in every factory adequate and suitable facilities for washing should be provided and maintained for the use of workers. Facilities for storing and drying clothing, facilities for sitting, first-aid appliances, shelters, rest rooms' and lunch rooms, crèches, should be there.

5. Penalties:-

The provisions of The Factories Act, 1948, or any rules made under the Act, or any order given in writing under the Act is violated, it is treated as an offence. The following penalties can be imposed:-

- (a) Imprisonment for a term which may extend to one year;
- (b) Fine which may extend to one lakh rupees; or
- (c) Both fine and imprisonment.

If a worker misuses an appliance related to welfare, safety and health of workers, or in relation to discharge of his duties, he can be imposed a penalty of Rs. 500/-

What is a factory?

According to section 2(m) "factory" means any premises including the precincts thereof-

- (i) whereon ten or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on, or
- (ii) whereon twenty or more workers are working, or working on any day of the preceding 12 months and in any part of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on, but does not include (i) a mine subject to the operation of the Mines Act 1952, or (ii) a mobile unit belonging to the armed forces of the Union of India,
- (iii) a railway running shed, or (iv) a hotel, (v) a restaurant, (vi) eating place., (vii) poly house or
- (viii) Greenhouse engaged in the activity of floriculture or pomology or high value crops.

Provisions regarding health of factory workers:-

To take care of the health of workers in factories, the Factories Act, 1948 provided for certain measures which are stated below:

(i) Cleanliness of the factory premises:-

Every factory shall be kept clean and free from effluvia arising from any drain, privy or other nuisance. It is specifically provided that in a Factory accumulations of dirt and refuse shall be removed daily, by sweeping or any other method, from the floors and benches of work rooms and from stair cases and passages, and disposed of in a suitable manner; the floor of every room shall be cleaned.

(ii) Disposal of Wastes and Effluents:-

Effective arrangement shall be made for the disposal of wastes and effluents arising out of manufacturing process in the factories.

(iii) Ventilation and Temperature:-

Provision to be made for ventilation and regulation of temperature in the factories. Effective and suitable measures shall be adopted for securing and maintaining in every room, adequate ventilation by the circulation of fresh air, and such a temperature as will secure to workers reasonable conditions of comfort, and prevent injury to health, and in particular the walls and roofs shall be of such material and so designed that such temperature shall not exceed but kept within reasonable limits.

(iv) Dust and Fume:-

In every factory, where due to manufacturing process, dust or fume or other impurity arise which is likely to be injurious to the health of workers employed, effective measures shall be taken to prevent its inhalation, and accumulation in any workroom. If it is necessary to install exhaust appliances, it would be installed near the point of origin of the dust, fumes, or other impurity. Measures shall be taken to enclose such points.

(v) Overcrowding:-

No room in any factory shall be overcrowded to such an extent which becomes injurious to the health of the workers employed therein. The Chief Inspector of factories by order in writing shall fix the maximum number of workers to be employed in each room in the factory.

(vi) Lighting:-

The Factories Act provides for sufficient and suitable lighting, natural or artificial where workers are working or passing through. Provision of cleaning of inner and outer surface is provided for all glazed windows and skylights used for the lighting of the workrooms. In every factory, effective provision shall be made for the prevention of-

- a) glare, either directly from a source of light or by reflection from a smooth or polished surface;
- b) the formation of shadows to such an extent as to cause eyestrain or the risk of accident to any worker.

(vii) Drinking Water:-

In every factory, effective arrangement shall be made at suitable places for sufficient supply of wholesome drinking water. Such places shall be legibly marked 'Drinking Water' in a language understood by a majority of the workers employed in the factory. In case of factories employing more than 250 workers, provisions shall be made for cooling drinking.

(viii) Latrines and Urinals:-

The Factories Act requires that provision should be made for —

- a) Sufficient latrine and urinal accommodation conveniently situated and accessible to workers while they are in the factory;
- b) Separate enclosed accommodation for male and female workers;
- c) Such accommodation being adequately lighted and ventilated;

- d) All such accommodation being maintained in a clean and sanitary condition;
- e) Sweepers being employed to clean latrines, urinals and washing places; Where the number of workers in a factory is more than 250
 - i) latrines and urinals shall be of prescribed sanitary types;
 - ii) the floor and internal walls of the latrines and urinals shall be laid with glazed tiles;
 - iii) floors and walls and the sanitary pans of latrines and urinals shall be thoroughly washed and cleaned at least once in every seven days with suitable detergents or disinfectants or with both.

For safety:-

Section 21 to 41 of the Factories Act 1948 deal with the provisions relating to safety to workers in a factory is as follows –

- 1) **Fencing machinery** - According to Section 21 of the Factories Act 1948, every dangerous machinery in a factory must be securely fenced to avoid accidents.
- 2) **Work on near machinery in motion** -Section 22, this situation arises when machinery is to be tested, while it is in motion/operation. Then it is to be tested by an adult well-trained person, who is meant for that purpose. (And whose name is recorded in the register for such purpose)
- 3) **Employment of young person in dangerous machines** -According to Section 23 of the said Act, no young person shall be required or allowed to work at any machine to which this section applies, unless he has been fully instructed as to the dangers arising in connection with the machine and the precautions to be observed, and- (a) has received sufficient training in work at the machine or is under adequate supervision by a person who has a thorough knowledge and experience of the machine. Sub-section (1) shall apply to such machines as may be prescribed by the State Government, being machines which in its opinion are of such a dangerous character that young persons ought not to work at them unless the foregoing requirements are complied with.
- 4) **Striking gear and devices for cutting off power** -According to Section 24 of the said Act, In every factory, suitable devices for cutting off power in emergencies from running machinery shall be provided and maintained in every workroom.

- 5) **Self-acting machines** -According to Section 25 of the Act, no traversing part of a self-acting machine in any factory and no material carried thereon shall, if the space over which it runs is a space over which any person is liable to pass, whether in the course of his employment or otherwise, be allowed to run on its outwards or inward traverse within a distance forty-five centimeters from any fixed structure which is not part of the machine.
- 6) **Casing of new machinery** -Section 26(1) of the said Act requires casing for new machinery to prevent accidents.
- 7) **Prohibition of employment of women and children near cotton-openers** -A cotton-opener is a dangerous machine; therefore, According to Section 27 of the Factories Act 1948, no woman or child shall be employed in any part of a factory for pressing cotton in which a cotton-opener is at work. Provided that if the feed-end of a cotton-opener is in a room separated from the delivery end by a partition extending to the roof or to such height as the Inspector may in any particular case specify in writing, women and children may be employed on the side of the partition where the feed-end is situated.
- 8) **Hoist and lifts** -According to section 28 of the said Act, Hoist, and lifts in a factory shall be maintained in a good mechanical condition and must be examined by a Competent Person at least once in every six months.
- 9) **Lifting machines, chains, ropes and lifting tackles** -Lifting machines, chains, rope and lifting tackles are used in factories for raising or lowering persons or good or materials. According to Section 29 of the Factories Act, they must be examined at least once in every 12 months by a confident person.
- 10) **Excessive weights** - Section 34 of Factories says that no person shall be employed in any factory to lift, carry or move any load so heavy as to be likely to cause him an injury. The State Government may make rules prescribing the maximum weights which may be lifted, carried or moved by adult men, adult women, adolescents and children employed in factories or in any class or description of factories or in carrying on in any specified process.
- 11) **Protection of eyes (Section 35)** - In respect of any such manufacturing process carried on in any factory as may be prescribed, being a process which involves –

(a) risk of injury to the eyes from particles or fragments thrown off in the course of the process, or

(b) risk to the eyes by reason of exposure to excessive light, the State Government may by rules require that effective screens or suitable goggles shall be provided for the protection of persons employed on, or in the immediate vicinity of, the process.

12) Precautions against dangerous fumes, gases etc.

(13) Maintenance of buildings -According to Section 40A of the said Act, If it appears to the Inspector that any building or part of a building in a factory is in such a state of disrepair as is likely to lead to conditions detrimental to the health and welfare of the workers, he may serve on the occupier or manager or both of the factory an order in writing specifying the measures which in his opinion should be taken and requiring the same to be carried out before such date as is specified in the order.

(14) Safety officers - Section 40(b) was inserted in the act in 1976 making provision for the appointment of for safety officer in the factories, where 1000 or more workers are employed or the State government by notification in official gazette may require the occupier, carrying on dangerous and hazardous nature of manufacturing process to appoint safety officers.

Welfare: Provisions Relating to Welfare of workers:

Section 52 to 50 of the Factories Act, 1948 lays down the Provisions relating to the welfare of workers employed in Industrial Establishments. Under the provisions of the said Act, the following facilities are to be provided by the occupier in the factory for the Welfare of the workers-

(1) Washing facilities (Section 42) - In every factory-

(a) adequate and suitable facilities for washing shall be provided and maintained for use of the workers therein;

(b) separate and adequately screened facilities shall be provided for the use of male and female workers;

(c) such facilities shall be conveniently accessible and shall be kept clean. The State Government may, in respect of any factory or class or description of factories or of any manufacturing process, prescribe standards of adequate and suitable facilities for washing.

(2) Facilities for storing and drying clothing (Section 43) -The State Government may, in respect of any factory or class or description of factories make rules requiring the provision therein of suitable place for keeping clothing not worn during working hours and for the drying of wet clothing.

(3) Facilities for Sitting (Section 44) -In every factory suitable arrangements for sitting shall be provided and maintained for all workers obliged to work in a standing position, in order that they may take advantage of any opportunities for rest which may occur in the course of their work

(4) First aid appliance (Section 45)-There shall, in every factory, be provided and maintained so as to be readily accessible during all working hours first-aid boxes or cupboards equipped with the prescribed contents, and the number of such boxes or cupboards to be provided and maintained shall not be less than one for every one hundred and fifty workers ordinarily employed at any one time in the factory.

(5) Canteens (Section 46) - The State Government may make rules requiring that in any specified factory wherein more than two hundred and fifty workers are ordinarily employed, a canteen or canteens shall be provided and maintained by the occupier for the use of the workers.

(6) Shelter, restrooms, and lunch rooms (Section 47) -

In every factory wherein more than one hundred and fifty workers are ordinarily employed adequate and suitable shelters or rest-rooms and a suitable lunch-room, with provision for drinking water, where workers can eat meals brought by them, shall be provided and maintained for the use of the workers:

(7) Creches (Section 48) –

In every factory wherein more than thirty women workers are ordinarily employed there shall be provided and maintained a suitable room or rooms for the use of children under the age

of six years of such women. Such rooms shall provide adequate accommodation, shall be adequately lighted and ventilated, shall be maintained in a clean and sanitary condition and shall be under the charge of women trained in the care of children and infants.

Industrial Dispute Act- 1947:

It is an act to make provision for the investigation and settlement of industrial disputes, and for certain other purposes. It provides for a special machinery of conciliation officers, work committees, court of inquiry, Labour courts, Industrial Tribunals and national Tribunals, defining their powers, functions and duties and also the procedure to be followed by them.

“Industrial dispute” means any dispute or difference between employers and employees, or between employers and workmen, or between workmen and workmen, which is connected with the employment or non-employment or the terms of employment or with the conditions of labour, of any person; Industrial disputes are of symptoms of industrial unrest in the same way that boils are symptoms of a disordered body.

Whenever an industrial dispute occurs, both management and workers try to pressurize each other. The management may resort to lock-out and the workers may resort to strike, gherao, picketing, etc.

Industrial Dispute machineries:

Some of the major industrial dispute settlement machinery are as follows:

1. Conciliation
2. Court of Inquiry
3. Voluntary Arbitration
4. Adjudication.

This machinery has been provided under the Industrial Disputes Act, 1947. It, in fact, provides a legalistic way of setting the disputes. As said above, the goal of preventive machinery is to create an environment where the disputes do not arise at all.

Even then if any differences arise, the judicial machinery has been provided to settle them lest they should result into work stoppages. In this sense, the nature of this machinery is curative for it aims at curing the ailments.

This machinery comprises following organs:

1. Collective bargaining
2. Code of discipline
3. Grievance procedure
4. Arbitration
5. Conciliation
6. Adjudication
7. Consultative machinery

Collective Bargaining

Collective bargaining is probably the most effective method of resolving industrial disputes. It occurs when representatives of a labour union meet management representatives to determine employees' wages and benefits, to create or revise work rules, and to resolve disputes or violations of the labour contract. The bargaining is collective in the sense that the chosen representative of the employees (i.e. the union) acts as a bargaining agent for all the employees in carrying out negotiations and dealings with the management. Collective bargaining benefits both employees as well as employers. This means that the basic interests of the management are protected and also the rights of the employees. The two sides have a responsibility towards each other.

Code Discipline

The code of discipline defines duties and responsibilities of employers and workers. The objectives of the code are:

1. To ensure that employers and employees recognize each other's rights and obligations
2. To promote constructive co-operation between the parties concerned at all levels;

3. To secure settlement of disputes and grievances by negotiation, conciliation and voluntary arbitration
4. To eliminate all forms of coercion, intimidation, and violence in industrial relations;
5. To avoid work stoppages;
6. To facilitate the free growth of trade unions; and
7. To maintain discipline in industry.

Grievance Procedure

Grievance procedure is another method of resolving disputes. All labour agreements contain some form of grievance procedure. And if the procedure is followed strictly, any dispute can easily be resolved.

In the meanwhile, a grievance may be understood as an employee's dissatisfaction or feeling of personal injustice relating to his or her employment relationship. A grievance is generally well-defined in a collective-bargaining agreement. It is usually restricted to violations of the terms and conditions of employment.

Arbitration

Arbitration is a procedure in which a neutral third party studies the bargaining situation, listens to both the parties and gathers information; and then makes recommendations that are binding on the parties. Arbitration is effective as a means of resolving disputes because it is:

1. Established by the parties themselves and the decision is acceptable to them, and
2. Relatively expeditious when compared to courts or tribunals. Delays are cut down and settlements are speed up.

Conciliation

Conciliation is a process by which representatives of workers and employers are brought together before a third party with a view to persuade them to arrive at an agreement by mutual discussion between them. The third party may be one individual or a group of people. The alternative name for third party is mediators.

Adjudication

Adjudication means a mandatory settlement of an industrial dispute by a labour court or a tribunal. Generally, the government refers a dispute or adjudication depending on the failure of conciliation proceedings. Section 10 of the Industrial Disputes Act, 1947, provides for reference of a dispute to labour court or tribunal. The Act also lays down rules regarding the composition and powers of labour courts and tribunals.

Consultative Machinery

Towards the end it is essential to refer to the consultative machinery set by the government to resolve conflicts. The main function of consultative machinery is to bring the parties together for mutual settlement of differences in a spirit of co-operation and goodwill. Consultative machinery operates at the plant, industry, state and the national levels.

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Chapter No.	Chapter Title	Content	Duration(in hours)
6.0	Production Management	i. Meaning of Production ii. Production Management – definition, objectives, functions and scope iii. Inventory Management, Basic idea	3

Meaning of Production:

Production is the process of making, harvesting or creating something or the amount of something that was made or harvested. Production is the method of turning raw materials or inputs into finished goods or products in a manufacturing process. In other words, it means the creation of something from basic inputs.

Thus production is-

1. The act or process of producing
2. The rate of producing or amount produced
3.
 - a. Something produced; product
 - b. A work of art, literature, etc.
 - c. A work produced on the stage, as a film, etc.
4. The making of a film or video, specif., the phase involving actual shooting
5. The creation of economic value; producing of goods and services

Production Management:

Production Management refers to the application of management principles to the production function in a factory. In other words, production management involves application of planning, organizing, directing and controlling the production process.

Production management deals with converting raw materials into finished goods or products. It brings together the 6M's i.e. men, money, machines, materials, methods and markets to satisfy the wants of the people. Production management also deals with decision-making regarding the quality, quantity, cost, etc., of production. It applies management principles to production. Production management is a part of business management. It is also called "Production Function."

Definition of Production Management

According to **Elwood Spencer Buffa**, "Production management deals with decision-making related to production processes so that the resulting goods or service is produced according to specification, in the amount and by the schedule demanded and at minimum cost."

By the words of **Mr, E.L. Brech**:

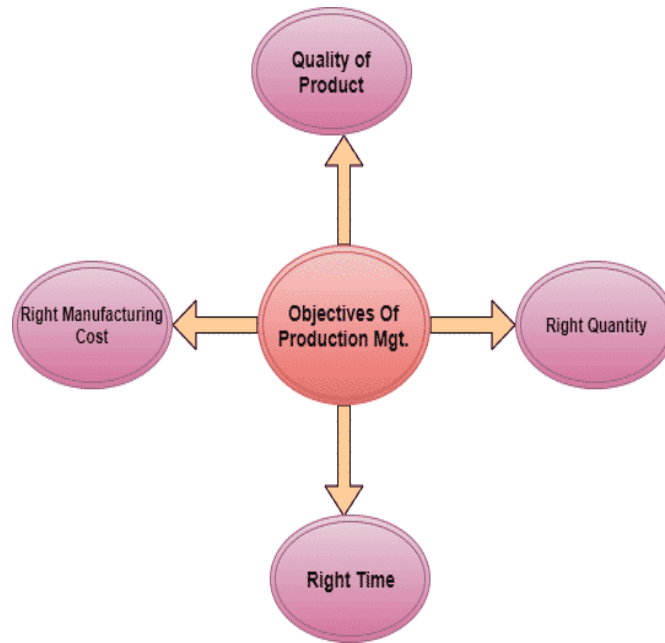
“Production Management is the process of effective planning and regulating the operations of that section of an enterprise which is responsible for the actual transformation of materials into finished products.”

In short, the main activities of production management can be listed as:

- (i) Specification and procurement of input resources namely management, material, and land, labour, equipment and capital.
- (ii) Product design and development to determine the production process for transforming the input factors into output of goods and services.
- (iii) Supervision and control of transformation process for efficient production of goods and services.

Objectives of Production Management

Objectives are the foundation of production management without which the production cannot get completed. Production management deals with decision-making related to production processes so that the resulting goods or service is produced according to specification, in the amount and by the schedule demanded and at minimum cost.



1.Right Quality

The quality of the product is a very important parameter for every organization without quality the product cannot establish itself in the competitive market. Today's the market is a buyers' market so one has to be very conscious about the quality aspect.

2. Right Quantity

The manufacturing organization should always be in the position to produce the product in the right number to the required quantity to satisfy the customer needs

3) Right Time

The time factor is very important in business timeliness of delivery is an important parameter as it judges the effectiveness of the production department.

4) Right Manufacturing Cost

Manufacturing cost is established before the product is actually manufactured because it can be a major distinguishing feature of the product.

Some other objectives are-

1. To produce the goods as per the quality demanded by the customers in most economic manner.
2. To sustain as well as to increase the level of customer satisfaction.
3. To make improvement in existing goods and services by regular innovations.
4. To maintain inventory at such levels that there may not be the blockage of working capital due to excessive stock and the production may not hamper due to unavailability of stock.
5. To ensure uninterrupted supply of goods and services in right quantity at right time and at right place.
6. To produce the goods as per market demand.
7. To keep proper maintenance of plant and machinery.

Characteristics of production management:

1. Production Management is the process of effective planning. It helps in regulating the operations of that section of an enterprise which is responsible for the actual transformation of materials into finished products.
2. Related to the production process. Goods and services are produced in accordance with the quantitative specifications and demand schedule with minimum cost.
3. Production Management is a set of general principles for production. Production management has a set of certain principles like economies, facility design, job design, schedule design, quality control, inventory control, work-study and cost, and budgetary control.

Functions and Scope of Production Management:



1. Selection of Product and Design:

Production management first selects the right product for production. Then it selects the right design for the product. Care must be taken while selecting the product and design because the survival and success of the company depend on it. The product must be selected only after detailed evaluation of all the other alternative products. After selecting the right product, the right design must be selected. The design must be according to the customers' requirements. It must give the customers maximum value at the lowest cost. So, production management must use techniques such as value engineering and value analysis.

2. Selection of Production Process:-

Production management must select the right production process. They must decide about the type of technology, machines, material handling system, etc.

3. Selecting Right Production Capacity

Production management must select the right production capacity to match the demand for the product. This is because more or less capacity will create problems. The production manager must plan the capacity for both short and long term's production. He must use break-even analysis for capacity planning.

4. Production Planning

Production management includes production planning. Here, the production manager decides about the routing and scheduling.

Routing means deciding the path of work and the sequence of operations. The main objective of routing is to find out the best and most economical sequence of operations to be followed in the manufacturing process. Routing ensures a smooth flow of work.

Scheduling means to decide when to start and when to complete a particular production activity.

5. Production Control

Production management also includes production control. The manager has to monitor and control the production. He has to find out whether the actual production is done as per plans or not. He has to compare actual production with the plans and finds out the deviations. He then takes necessary steps to correct these deviations.

6. Quality and Cost Control

Production management also includes quality and cost control. Quality and Cost Control are given a lot of importance in today's competitive world. Customers all over the world want good-quality products at cheapest prices. To satisfy this demand of consumers, the production manager

must continuously improve the quality of his products. Along with this, he must also take essential steps to reduce the cost of his products.

7. Inventory Control

Production management also includes inventory control. The production manager must monitor the level of inventories. There must be neither over stocking nor under stocking of inventories.

If there is an **overstocking**, then the working capital will be blocked, and the materials may be spoiled, wasted or misused.

If there is an **under stocking**, then production will not take place as per schedule, and deliveries will be affected.

8. Maintenance and Replacement of Machines

Production management ensures proper maintenance and replacement of machines and equipment. The production manager must have an efficient system for continuous inspection (routine checks), cleaning, oiling, maintenance and replacement of machines, equipment, spare parts, etc. This prevents breakdown of machines and avoids production halts.

Inventory Management:

Inventory meaning:-

Inventory or stock is the goods and materials that a business holds for the ultimate goal of resale. Inventory is the array of finished goods or goods used in production held by a company.

Inventory can be valued in three ways. The first-in, first-out (FIFO) method says that the cost of goods sold is based on the cost of the earliest purchased materials. The last-in, first-out (LIFO) method states that the cost of goods sold is valued using the cost of the latest purchased materials. The weighted average method requires valuing both inventory and the cost of goods sold based on the average cost of all materials bought during the period.

Inventory management:

Inventory management is a discipline primarily about specifying the shape and placement of stocked goods. Inventory management is a systematic approach to sourcing, storing, and selling inventory both raw materials (components) and finished goods (products).

In business terms, inventory management means the right stock, at the right levels, in the right place, at the right time, and at the right cost as well as price.

Inventory management is the act of keeping track of a company's stocked goods and monitoring their weight, dimensions, amounts, and location. The goal of inventory management is to minimize the cost of holding inventory by helping business owners know when it's time to replenish products, or buy more materials to manufacture them.

Why inventory management is important?

Effective inventory management is essential for ensuring a business has enough stock on hand to meet customer demand. If inventory management is not handled properly it can result in a business either losing money on potential sales that can't be filled, or wasting money by stocking too much inventory. An inventory management system can also help you prevent a number of other mistakes.

No	Inventory Management Techniques	How Performance Improvement will be achieved
I	Economic Order Quantity	Ability to know how much and when to replenish inventory
ii	Marginal Analysis	Reduce loss for inventory that is perishable within a short period of time by ensuring they are ordered at the right time.
iii	Just-in-time	Ordering inventory when they are required thus reducing storage/holding costs
iv	Simulation	Capability of laying out inventory management plans for the organization
v	Order Batching	Minimizing on unnecessary costs on transport
vi	Vendor Managed Inventory	Improving on inventory management systems by engaging outsourced suppliers to management inventory monitoring and replenishment.

Chapter No.	Chapter Title	Content	Duration(in hours)
8.0	Entrepreneur and Entrepreneurship	<ul style="list-style-type: none"> i) Definition of Entrepreneur and Entrepreneurship ii) Qualities required by an entrepreneur iii) Functions of an entrepreneur iv) Entrepreneurial motivation 	3

Definition of Entrepreneur:-

An entrepreneur is an individual who creates a new business, bearing most of the risks and enjoying most of the rewards. The entrepreneur is commonly seen as an innovator, a source of new ideas, goods, services, and business or procedures. He is someone who starts their own business, especially when this involves seeing a new opportunity. As the decision maker he decides what, how, and how much of a good or service will be produced. An entrepreneur supplies risk capital as a risk taker, and monitors and controls the business activities. The entrepreneur is usually a sole proprietor, a partner, or the one who owns the majority of shares in an incorporated venture. It is said that Entrepreneurs see possibilities and solutions where the average person only sees annoyances and problems.

“The entrepreneur always searches for change, responds to it, and exploits it as an opportunity.” – Peter Drucker.

“Entrepreneurs are simply those who understand that there is little difference between obstacle and opportunity and are able to turn both to their advantage.” – Niccolo Machiavelli.

Definition of Entrepreneurship:

The meaning of entrepreneurship involves an entrepreneur who takes action to make a change in the world. Entrepreneurs take the idea and execute it. Entrepreneurship is about execution of ideas.

Entrepreneurship is the act of creating a business or businesses while building and scaling it to generate a profit. Entrepreneurship is the ability and readiness to develop, organize and run a business enterprise along with any of its uncertainties in order to make a profit. The most prominent example of entrepreneurship is the starting of new businesses. In economics, entrepreneurship connected with land, labour, natural resources and capital can generate a profit. The entrepreneurial vision is defined by discovery and risk-taking and is an indispensable part of a nation's capacity to succeed in an ever-changing and more competitive global marketplace.

Types of Entrepreneurship:

➤ Small Business Entrepreneurship-

These businesses are a hairdresser, grocery store, travel agent, consultant, carpenter, plumber, electrician, etc. These people run or own their own business and hire family members or local employee. For them, the profit would be able to feed their family and not making 100 million business or taking over an industry. They fund their business by taking small business loans or from friends and family.

➤ Scalable Startup Entrepreneurship-

This start-up entrepreneur starts a business knowing that their vision can change the world. They attract investors who think and encourage people who think out of the box. The research focuses on a scalable business and experimental models so, hire the best and the brightest employees. They require more venture capital to fuel and back their project or business.

➤ Large Company Entrepreneurship-

These huge companies have defined lifecycle. Most of these companies grow and sustain by offering new and innovative products that revolve around their main products. The changes in technology,

customer preferences, new competition, etc., build pressure for large companies to create an innovative product and sell it to the new set of customers in the new market. To cope up with the rapid technological changes, the existing organization either by innovation enterprises or attempt to construct the product internally.

➤ **Social Entrepreneurship-**

This type of entrepreneurship focuses on producing product and services that resolve the social needs and problems. Their only motto and goal are to work for society and not make any profits.

Importance of Entrepreneurship:

- ❖ **Creation of Employment-** Entrepreneurship generates employment. It provides an entry-level job, required for gaining experience and training for unskilled workers.
- ❖ **Innovation-** It is the hub of innovation that provides new product ventures, market, technology, quality of goods, etc., and increases the standard of living of the people.
- ❖ **Impact on Society and Community Development-** A society becomes greater if the employment base is large and diversified. It changes society and promotes facilities like higher expenditure on education, better sanitation, fewer slums, and a higher level of homeownership. Therefore, entrepreneurship assists the organization in a more stable and high quality of community life.
- ❖ **Increase Standard of Living-** Entrepreneurship helps to improve the standard of living of a person by increasing the income. The standard of living means, increase in the number of consumption of various goods and services by a household for a particular period.
- ❖ **Supports research and development-** New products and services need to be researched and tested before launching in the market. Therefore, an entrepreneur also dispenses finance for research and development with research institutions and universities. This promotes research, general construction, and development in the economy.

Qualities of a good Entrepreneur:

Not all entrepreneurs are successful; there are definite characteristics that make entrepreneurship successful. Few of them are mentioned below:

- Ability to take a risk- Starting any new venture involves a considerable amount of failure risk. Therefore, an entrepreneur needs to be courageous and able to evaluate and take risks is an essential part of being an entrepreneur.
- Innovation- It should be highly innovative to generate new ideas, start a company, and earn profits out of it. Change can be the launching of a new product that is new to the market or a process that does the same thing but more efficient and economical way.
- Visionary and Leadership quality- To be successful, the entrepreneur should have a clear vision of his new venture. However, to turn the idea into reality a lot of resources and employees are required. Here, leadership quality is paramount because a leader imparts and guides their employees towards the right path of success.
- Open-Minded- In a business, every circumstance can be an opportunity and used for the benefit of a company.
- Flexible- An entrepreneur should be flexible and open to change according to the situation. To be on the top, a businessperson should be equipped to embrace change in a product and service as and when needed.
- Know your Product- A company owner should be the product offerings, and also the latest trend in the market. It is essential to know if the available product or service meets the demands of the current market, or it is time to tweak it a little. Being able to point on you and then alter as needed is a vital part of entrepreneurship.
- Self-discipline- This is one of the most essential characteristics of a successful entrepreneur. If an entrepreneur is able to accomplish essential tasks (whether he is feeling up to it or not), then he will be able to achieve higher success. Self-discipline basically means to master the inner self and inner emotions to generate a sense of responsibility of getting the job done, which fosters self-direction.
- Creative thinking- A successful entrepreneur is a creative thinker with loads of ideas constantly flowing through her mind. This drastic ability to think of a wide range of new ideas helps an entrepreneur to initiate different types of business in a unique, creative way.
- Persistence- Persistence is the most basic and essential quality of a successful entrepreneur because even good entrepreneurs experience failures and hurdles. But with persistence, you're able to pick yourself back up and keep moving towards your goals.

Functions of an entrepreneur:

- **Taking Initiative:-**This unique function of entrepreneurship provides our civilization with a wide variety of products, ways of actions, production techniques, etc. Therefore, taking initiative with such end and qualification is the prime function of entrepreneurship in every economy.
- **Organizing Resources:-**Organizing entails identifying those resources that are required to transform a particular idea into reality. The resources include human and nonhuman resources.Organizing in entrepreneurship will increase productivity, promote new ventures, distribute and supervise work and responsibility, and will remove barriers to work.
- **Identifying Opportunities and Prospects:-** It identifies new opportunities in the socio-economic arena which have got profitable prospects therefore, entrepreneurs are called searchers of hopes into blind spots and this function enormously indebted our society to entrepreneurship.
- **Risk-Taking:-** Entrepreneurship takes the risk for the new venture. It also takes the risk for theft, robbery, snatching market fall and hooliganism that may be involved with new entrepreneurship. This is a major function of entrepreneurship in developing countries.
- **Decision Making:-** Entrepreneurship has to decide upon equipment to be used quality, price and its variation, deficiency, capital structure, the feasibility of the project, organizational structure, philosophy of management, etc. that will guide, run and prosper the new venture or distinct attempt for entrepreneurship.
- **Technology Transfer and Adaptation:-**Entrepreneurship throughout the world brings invented technology from different comers of the world and makes it appropriate by making required adjustments for local conditions. This function of entrepreneurship involves identifying appropriate technology with market potentials and adapts it into the local environment.
- **Innovation:-**Innovation is a creative means to add new utilities to existing situations or products. Entrepreneurship through innovation creates innovative products or operations for human society.
- **Fostering Autonomy:-**Entrepreneurship Fosters autonomy to advent something new of value by the application of devoted efforts and time.
- **Social Responsibility:-**Entrepreneurship performs social responsibility that protects the welfare, benefit and economic gain of the society. It also promotes the community standard by providing jobs and amenities.

- **Public Relations:-**Entrepreneurship is a new venture that requires social acceptance by the regulatory bodies and the public at large. The government, as well as the persons' who will be subject to entrepreneurship, would be convinced through public relations to accept and to allow the entrepreneur to execute an entrepreneurial venture.
- **Experience Sharing:-**Entrepreneurship holds workshops, industrial visits through which the entrepreneurial experience in different counties may be shared with a widespread adaptation of success.
- **Managerial Roles:-**Entrepreneurs perform several managerial roles to keep their venture functioning with success.
- **Balanced Economic Development:-**Entrepreneurs make it possible by establishing business ventures in various parts of the country in various sectors of the industry.

Entrepreneurial motivation:-

Motivation:-

Motivation is the set of forces that causes people to engage in one behaviour rather than some alternative behaviour. The term, "Motivation" has come from the Latin word 'movere' the meaning of the same is "to move". That means to move from present situation to better situation. Motivation is the willingness to do something, and is conditioned by this action's ability to satisfy some need for the individual. The common man thinks that people go for business to earn money, but it is not always true.

Factors of Motivation:-

1) Internal factors include:-

- (a) Desire to do something new
- (b) Educational background
- (c) Occupational background or experience.

2) External factors include:-

- (a) Government assistance and support
- (b) Availability of labour and raw-material
- (c) Encouragement from big business houses
- (d) Promising demand for the product.

Entrepreneurial motivation:

Entrepreneurial motivation is the process that activates and motivates the entrepreneurs to exert high level of efforts for the achievement of his/her entrepreneurial goals. It is the process of transforming an ordinary individual to a powerful businessman, who can create opportunities and helps in maximizing wealth and economic development. It is defined as various factors stimulate desires and activates enthusiasm in entrepreneurs which make them attain a particular goal. Entrepreneurship is the process of identifying strengths and opportunities which help in the realization of one's dreams for designing, developing and running a new business by facing threats and risks effectively. To become an entrepreneur one should identify their strengths and opportunities from the external environment. Here motivation plays a major role in identifying their own strengths to become strong leaders or powerful entrepreneurs which make them to accepting risks and face uncertainty for the purpose of reaching pre-described goals.

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Chapter No.	Chapter Title	Content	Duration(in hours)
10.0	Micro and Small Enterprises	<ul style="list-style-type: none"> i) Definition of Micro & Small enterprises ii) Meaning and characteristics of Micro and Small enterprise iii) Scope of SSI with reference to self employment iv) Procedure to start SSI – idea generation, SWOT analysis v) Selection of site for factories 	4

Meaning of Enterprise:-

Enterprise or organization means to plan a business, to start it and run it. It means to bring the factors of production together, assign each its proper task, and pay them remuneration when the work is done. It implies not only running of a business, but also shouldering the loss, if any. The man who undertakes all this work is called an organizer, or, more commonly, an entrepreneur. Organizing and risk-taking are the two main functions of the entrepreneur.

Micro enterprises:-

A micro enterprise is a small business which sells goods and/or services to a local area or a local market. It employs less than 10 people generally and is geographically restricted. Typically a micro enterprise starts with some form of funding – known as micro credit or micro finance. A micro enterprise is an enterprise where investment in plant and machinery does not exceed 25 lakhs and where the investment in equipment does not exceed Rs. 10 lakh. The grocery store in your locality that sells groceries, FMCG goods, sometimes dairy products and fruits and vegetables is a classic example of micro enterprise.

Objectives of Micro Enterprise:

- Micro enterprises aim to create large-scale employment in the economy, separate of the formal sector. And they can achieve this target with very limited finances and investment.
- Another objective is to spread industries and trade in an economically backward area. This helps in the development of the overall economy.
- Micro enterprises also aim to improve the mobilization of the abundance of natural resources in our country.
- Also to improve the living conditions of all the citizens of the country, irrespective of where they live and work.

Small enterprises:-

A small enterprise is an enterprise where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed Rs. 5 crore and where the investment in equipment is more than Rs.10 lakh but does not exceed Rs. 2 crore.

Objectives of Small Enterprises:-

- To generate a huge employment opportunities.
- To eradicate unemployment problem from the country.
- To bring backward areas in the mainstream of national development.
- To promote balance regional development.
- To ensure more equitable distribution of national income.
- To improve the level of living of the people of various rural region.
- To ensure effective mobilization of country's resources.

Characteristics of Micro and Small enterprises:-

- **Lower Revenue and Profitability**

Micro and small-scale business revenue is generally lower than companies that operate on a larger scale. The Business Administration classifies micro and small businesses as companies that bring in less than a specific amount of revenue, depending on the business type.

➤ **Smaller Teams of Employees**

Small-scale businesses employ smaller teams of employees than companies that operate on larger scales. The smallest businesses are run entirely by single individuals or small teams.

➤ **Small Market Area**

Small-scale businesses serve a much smaller area than corporations or larger private businesses. The smallest-scale businesses serve single communities, such as a convenience store in a rural township.

➤ **Sole or Partnership Ownership and Taxes**

The corporate form of business organization is not well-suited to small-scale operations. Instead, small-scale businesses prefer to organize as sole proprietorships, partnerships or limited liability companies. These forms of organization provide the greatest degree of managerial control for company owners, while minimizing the hassle and expense of business registration.

➤ **Limited Area of Fewer Locations**

A small-scale business, by definition, can be found only in a limited area. These companies are not likely to have sales outlets in multiple states or countries.

➤ **Low amount of Capital or investment**

➤ **Minimum level of management**

Small scale industries (SSI):-

Small scale industries are those industries in which the manufacturing, production and rendering of services are done on a small or micro scale. These industries make a one-time investment in machinery, plants, and industries, but it does not exceed Rs 1 Crore. The SSI's are the lifeline of the economy, especially in developing countries like India. These industries are generally labour-intensive, and hence they play an important role in the creation of employment. SSI's are a

crucial sector of the economy both from a financial and social point of view, as they help with the per capita income and resource utilization in the economy.

Scope/ Importance of SSI with reference to self-employment:-

SSI plays an important role for the development of Indian economy in many ways. About 60 to 70 percent of the total innovations in India come from the SSIs. Many of the big businesses today were all started small and then nurtured into big businesses. The SSI sector continues to remain an integral part of Indian economy with significant contribution to Gross Domestic Product (GDP), industrial production and employment generation in India. The scope of SSI are discussed below-

- SSI uses labour intensive techniques. Hence, it provides employment opportunities to a large number of people. Thus, it reduces the unemployment problem to a great extent.
- SSI provides employment to artisans, technically qualified persons and professionals.
- It also provides employment opportunities to people engaged in traditional arts in India.
- SSI accounts for employment of people in rural sector and unorganized sector.
- It provides employment to skilled and unskilled people in India.
- The employment capital ratio is high for the SSI.
- It provides employment opportunities to women in India.
- It promotes entrepreneurial skills among women as special incentives are given to women entrepreneurs.
- It is important to note that Small Scale Industries employs more people than all industries after agriculture.
- SSIs employ people in urban as well as rural areas.
- SSI distributes employment patterns in all parts of the country and prevents unemployment crisis.

The Encouragement of small-scale industries would serve to counteract the seasonal unemployment in agriculture and Thus to utilize labour which might otherwise go to waste. These industries offer limitless opportunities for self-employment. It is these self-employed persons who are the backbone of the nation.

Procedure to start SSI: idea generation-

Small Scale Business provides more independence than the large scale business and through this type of business one can fulfill their dream to become an entrepreneur. It eliminates much of the overhead expense and extensive planning required in larger business ventures. One can set up small-scale industries by following the simple procedures, which are as follows:

Step 1: Decision Making: First the owner needs to prepare the description for the small scale industry you want to set up. It is necessary to decide whether you wish to set up a corporation, proprietorship or partnership.

Step 2: Scanning of Business Environment: Before setting up the industry, it is always essential to study and understand the prevailing business environment in which they operate particularly the industrial policy, economic policy, licensing policy, legal environment, and technological environment. The environment impacts a lot in setting up a proper industry.

Step 3: Product Selection: then it needs to decide the product the owner wish to manufacture or the service he/she wish to offer. While choosing the product or service the owner wants to offer, must conduct a good market research and learn about the prevailing competition in the market.

Step 4: Location: The owner needs to choose a location to set up the small scale industry. While choosing the location such factors such as nearness to market, sources of material availability of raw materials, labor, transportation services, modern infrastructural facilities and other things are considered. Location determines the success or failure of the enterprise.

Step 5: Technology: To manufacture any item, technology is used. The entrepreneur should collect information on all available technologies, and the most suitable one should be identified. This will also be useful to determine the type of machinery and equipment to be installed.

Step 6: Finance- Finance is the lifeblood of the enterprise. So, the next big step is to arrange for finance. No business can be created, with zero capital. If the owner don't have enough finance and then the best way the owner can choose is to borrow or take a loan.

Step 7: Provisional Small Scale Industry (SSI) Registration-To obtain SSI registration, the owner must apply for provisional SSI registration certificate. This certificate is given when the unit is in pre-operative stage and helps SSI unit obtain term loans and working capital.

Step 8: Installation of Machinery- Once the above formalities have been completed; the next step is to procure machinery and begin its installation as per the plant layout.

Step 9: Recruitment of Manpower- Once machines are installed, the need for manpower arises to run them. So, the quantum and type of manpower are to be decided. The sources of getting desired labor are also important. This follows the recruitment, training, and placement.

Step 10: Start the Business/production- The next step towards having a permanent license is to start the business with SSI certificate. The owner should start the production in the factory so that permanent license could be given.

Step 11: Marketing- Marketing is the most important activity as far as the entrepreneurial development is concerned. Marketing and business advertising form the next big step of setting up a small scale industry.

Step 12: Apply for Permanent SSI registration- After started the business, the owner should apply for permanent SSI registration. This could be done by applying online through state website or through the Zonal office or district office of the department.

Step 13: Market Research- Once the product or service is introduced in the market, there is strong need for continuous market research to assess needs and areas for modification, up gradation and growth.

Step 14: Monitoring- Periodical monitoring and evaluation not only of markets but also production, quality, and profitability help in knowing where the firm stands in comparison to performance envisaged in the business plan.

SWOT ANALYSIS:

A SWOT analysis is a technique used to determine and define your Strengths, Weaknesses, Opportunities, and Threats – SWOT. SWOT analyses can be applied to an entire company or organization, or individual projects within a single department. The primary objective of a SWOT

analysis is to help organizations develop a full awareness of all the factors involved in making a business decision. To run a successful business, we should regularly analyze our processes to ensure we are operating as efficiently as possible. While there are numerous ways to assess our company, one of the most effective methods is to conduct a SWOT analysis. Sometimes it's wise to perform a general SWOT analysis just to check on the current landscape of our business so we can improve business operations as needed. The analysis can show us the key areas where our organization is performing optimally, as well as which operations need adjustment. A SWOT analysis is a planning process that helps our company to overcome the challenges and determine what new leads to pursue. By taking the time to put together a formal SWOT analysis, we can see the whole picture of our business. From there, we can discover ways to improve or eliminate our company's weaknesses and capitalize on its strengths.

Factors of SWOT analysis:-

Internal factors-

Strengths (S) and weaknesses (W) refer to internal factors, which are the resources and experience readily available to the owner. These are some commonly considered internal factors:

- Financial resources (funding, sources of income and investment opportunities)
- Physical resources (location, facilities and equipment)
- Human resources (employees, volunteers and target audiences)
- Access to natural resources, trademarks, patents and copyrights
- Current processes (employee programs, department hierarchies and software systems)

External factors

External forces influence and affect every company, organization and individual. Whether these factors are connected directly or indirectly to an opportunity (O) or threat (T), it is important to note and document each one. External factors are typically those things which are not controllable, such are-

- Market trends (new products, technology advancements and shifts in audience needs)
- Economic trends (local, national and international financial trends)
- Funding (donations, legislature and other sources)
- Demographics environment
- Relationships with suppliers and partners
- Political, environmental and economic regulations

Selection of sites for Factories:-

Every entrepreneur is faced with the problem of deciding the location for his/her factory or plant. Location of the business is the most important factor influencing its success or failure. It is a long-term decision which should take into consideration not only the present requirements of the organization but also its future expansion plans. Errors in location may be very difficult and expensive to rectify. Location of a plant has a bearing on the layout of machinery and equipment as well as on the process of production. The objective of a location plan is to find out the optimum or best location for the particular plant. The location of the plant should also be able to meet the environmental guidelines and other regulations set by the Government specific to a particular industry.

Factors affecting the location of a factory are-

(1)Primary Factors:-

(i) Availability of Raw Materials:

Raw materials form major proportion of the finished product. Unrestricted and regular supply of raw material is very necessary for carrying out unrestricted production. Nearness to the source of raw material is very economical for an industrial unit. On account of this consideration many industries have been set up near the source of supply of raw material.

(ii) Availability of labour:

Labour implies both the skilled and unskilled workers needed for different types of activities. The supply of un-skilled labour does not create any serious problem because such labour is available everywhere. But the skilled labours are available only at specific centres. So it affects the location of a factory.

(iii) Availability of Power and Fuel:

Availability of cheap power and fuel supply sources is another decisive factor in selecting proper location of an industrial unit.

(iv) Availability of Transport and Communication facilities:

Adequate and quick facilities of transport must be kept in mind for quick delivery of raw materials to the factory and finished products to the market.

(v) Nearness to Market:

Market greatly affects the establishment of an industrial unit and is in fact, dominant factor in locating an industrial unit in modern times. The production of goods is undertaken with the aim of selling them quickly which is possible only on account of nearness to market.

(2) Secondary Factors:-

Besides the above primary factors, there are some other factors which have bearing on the location of industries.

(i) Nearness to adequate Banking and credit facilities:

For the efficient and smooth running of the business and for meeting working capital requirements, banking facilities play an important role. Nearness to banks and other financial institutions is an important consideration now-a- days in deciding location of an industrial unit.

(ii) Facilities of Repairs:

In order to maintain uninterrupted production, facilities with regard to repairs of machinery, plant and other components (in case of breakdown), must be kept in mind before setting a

factory. A large scale concern can afford to install its own repair workshops, whereas small concerns may rely on various repair shops working near the factory.

(iv) Soil, Climate and Topography of a place:

Soil and climatic conditions are very important for the establishment of various type of industries like tea, coffee, rubber and tobacco. On account of this factor, jute industry developed in West-Bengal and tea industry in Assam. Similarly topography (e.g., hilly or rocky surface) of a place also influences location of an industry.

(v) Govt, policies and regulations:

Government concession and subsidies like cheap land, power and tax concession and subsidized raw materials etc., are provided in order to develop that particular area. Such measures are undertaken by the Govt, in order to ensure balanced and regional growth of industries in India. This is also an important factor for factories.

(vii) Industrial atmosphere:

This factor refers to the thinking of the people with regard to a particular industry in a particular area. They involve themselves completely in the intricacies and various operations of the machines and implements being used in the industry.

(viii) Personal factors:

Sometimes personal likes and dislikes also influence location of a particular industrial unit.

(xi) Tastes and preferences of people:

Before establishing an industrial unit in a particular region, buying habits, tastes, likes and dislikes of people in that area must be taken into consideration.

(x) Political and economic situation:

Political harmony and peace in a particular region encourage the establishment of industrial units. On the other hand, disturbed political and economic set up discourages the growth of industries in the region.

(xi) Possibilities of future expansion:

The area for location should be such as to provide all possible opportunities for future development and expansion of the industrial unit without involving extra cost. Every industrial undertaking is established with the aim to expand in future.

(xii) Existence of competitive industries:

Limited and healthy competition encourages the growth of industrial units in a particular region. On the other hand, unhealthy competition retards the industrial growth in a region.

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