Lectures Notes

On

Entrepreneurship and Management and Smart Technology (Subject Code-Th-1)

5th Semester in Mechanical Engg

Prepared By

Er.Rashmi Ranjan Lenka

Sr.Lecturer

Department Of Mechanical Engg

G.I.E.T (Polytechnic), Jagatpur, Cuttack, Odisha-75

Module # 1

- Entrepreneurship
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CONCEPT OF ORGANIZATION & ENTERPRISE & MANAGEMENT

BUSINESS:

- **It includes various activities needed for the purpose of manufacturing, assembling, collecting, extracting, constructing, grading, processing, packaging, transporting, purchasing, selling, marketing, trading, servicing, etc of any goods or services.**
- In short the term business means exchange of goods, money or services of **mutual benefit.**

FEATURES OF BUSINESS.

- **Plurality of persons : There must be at least two persons or organizations to carry out business. One needs at least one customer to do business.**
- **Purchase and sell: There must be a seller and a purchaser in any business.**
- **Goods and services: The person conducting business must deal in certain goods or services for economic gain.**
- **Monetary consideration: In a business transfer of goods or services from one person to another is for monetary consideration.**
- **Repetition of dealing**: In a business there must be repetition of the dealings. An isolated single transaction is not a business. A person may purchase a flat and sold it at a profit. It is not business. But if he continues to purchase some other thing like a land and sales it and so on it is termed as business.
- **Profit motive**. The motive of business is always to earn profit. Selling goods or services at cost is not business. If motive is for any social, charitable, voluntary or mutual gain it is not business.
- **Risk**. Risk is an inseparable component of a business. There may be risk of not selling, risk of theft, risk of loss for many reasons. But in a business the more is the risk more is the profit.

COMPONENTS OF BUSINESS

Broadly business has two major components.

A Industry & B) Commerce.

A) Industry : Industry is a place where goods or services are produced. It can be classified in to five categories.

1. Manufacturing Industries: The economic activities concentrate around making product either for end use or for use by any other undertaking. Production activities are carried out at a particular place called factory or mill using man power and machineries. They are of four categories.

- Assembling Industry : This type of industry purchase components, parts, assembling equipments or sometimes produce some key parts for assembling the finished product. e.g TV assembling, Cycle, Car etc.
- Processing Industry: This type of industries procure raw materials and pass them through different processes like cleaning, grinding, heating, modifying shaping, polishing etc to produce finished product. Eg Furniture making, Textile mill, Jute mill etc.

- Analytical Industry: In this type of industry raw material is fed at one end and several different products come out at the end of different processes by due segregation, separation, analysis etc. eg: Flour mill, Petroleum products, Milk Plant etc.
- Mixed or Synthetic type: In this type of industry different raw materials are combined through different processes and final product comes out. Eg: Paint factory, Pharmaceutical or Ayurvedic medicine, Cosmetics etc.
- Extractive Industries: This type of industries extract different useful materials or commodities from nature. Eg: Mining industries, Forest produce, marine product, deep sea fishing etc.
- Genetic Industries: This type of industries are engaged in the process of reproduction or multiplication of the products which involves some life. It involves several stages of life of product and covers one generation to other. Eg. Poultry, Fisheries,
- Construction Industry: This type of Industry takes up infrastructure construction works like roads, bridges, dams, Railways, factories, canals etc. at different sites.
- Service Industry : They only provide services to the industries, other organization, people who ever needs the service. Eg. Garrages, repair shops, nursing homes, consultancy houses etc.
- Commerce : The economic activity which bridges gap between producer and the consumer is known as commerce. This includes i) trade and ii) aid to trade.
- Trade : It refers to actual transfer of ownership of goods or services from the producer to the consumer through various middlemen. It is actually sale and purchase of goods or services. Buying and selling activities are trading activities. Trade can be classified into four categories.
  a) Retail and wholesale
  b) Local and regional
  c) National and international
  d) Import and export.
- Retail & wholesale trade: Retail trade refers to direct sale of goods or services to the end user. The person selling to the consumers in small quantities is a retailer. The retailer gets the commodities in large quantities from the whole seller. Whole sale trade refers to sale of goods or services in large quantity to a small trader.
- Local & regional trade: When buying and selling of commodities are confined to a particular locality it is known as local trade. If the buying and selling is confined to a region it is known as regional trading. Local trading is in small quantities where as regional trading is comparatively in larger quantity.
- National and international trade. When goods and services are bought and sold within the boundary of the country where both the buyer and seller are

within the country it is known as national trade. But when goods and services are bought and sold between countries ie outside the boundary of the country it is international trade.

- Import trade & export trade: When goods are bought from other countries to meet the domestic demand it is known as import trade. The purchaser remains within the country but the seller belongs to other country. When the country sells its surplus goods or services to other countries it is known as export trading. Here the seller is within the country and the buyer belongs to other country.

ii) Aids to trade: Activities like transportation, packaging, Banking, Insurance, Advertising etc are aids to trade. So persons carrying out these activities are businessmen.

DIFFERENT FORMS OF BUSINESS ORGANIZATION

Different forms of business organization can be explained with the help of the chart given bellow.

1 Sole-proprietorship : When the business is owned by a single person by investing his own resources and skill it is known as sole proprietorship.

<u>Characteristics</u> :

- Owned and controlled by single individual
- Investment, profit, loss, risk all goes to individual's account.
- Legal formalities like license, permission, clearance etc are not required.
- Unlimited freedom to expand, close or shift his business to other place. He is the sole decision maker for his business.
- It has no separate legal entity. Legal proceedings concerning his business, if any, has to be filed in the name of the owner of the business.
- Presence of employees does not change the status of a sole proprietorship.
- The sole proprietor enjoys unlimited liabilities.

2 Partnership: When more than one person under an agreement start a business together in accordance with section-4 of Indian Partnership Act-1932 , it is called partnership business.

<u>Characteristics of Partnership</u> :

- Minimum members is two and maximum is 20. But in case of banking or financial business membership is restricted to 10.
- Partnership comes into existence when partnership deed, valid in the eyes of law, is executed.
- Motive of all partners must be to carry out business, earn profit and share it.
- A partner in a partnership is an agent for other partners and at the same time he is also principal for other partners. Activities of one partner is binding on other partners.
- The liabilities of each and every partner is unlimited.

- A partner ship firm has no separate legal entity apart from the owners. Both the firm and the partners are considered one unit in the eyes of the law.
- Partnership is based on mutual faith, confidence and understanding among members.
- Transfer of share in case of partnership is illegal. If there is a need to transfer the share to another, it can only be done with the consent of all other partners and partnership may be formed by fresh agreement by inducting a new member.
- To carry out any proposal in case of business decision unanimous consent of all partners is needed.
- The capital of the partnership firm is the amount contributed by each member as capital. The profit or loss ia shared in proportion to the capital contribution.
- Partners may authorize one senior/experienced partner as managing director to manage the firm on their behalf. In some cases duties and responsibility may be divided among the partners according to their capabilities.
- Usually partnership firms comes to a close in the event of death, retirement or insolvency of a partner. It may also close down in the event of continuous loss or on the directive of court.

3 Joint Hindu family business: Joint Hindu family business came into existence after operation of Hindu Succession Act-1956 and amendment thereof. The business is carried out by the head of the family known as Karta and has full control over the income and expenditure of the family. After death or retirement of Karta the next senior member of the family becomes the Karta and takes over the business of the family.

4 Joint stock company: To meet the growing demand of business joint stock companies are formed which are governed and regulated by Section 3 of 'The Indian Companies Act 1956'. It is defined as 'A company limited by shares, having a permanent paid up nominal share capital of fixed amount divided into shares also of fixed amount held and transferable by stock and formed on the principle of having in its members only the holders of those shares or stock and no other person'.

A joint stock company can ordinarily be defined as an artificial person created by law, having distinctive name with a common seal, a common capital with limited liabilities and with perpetual succession.

Characteristics:

- An incorporated Association : It is an association of persons and come into existence only after registration under the Companies Act.
- An artificial legal person: Once it is incorporated as a company after registration, it becomes a person in the eyes of the law and enjoys the right to perform its duties as if a living being.
- Distinct legal entity : A company is regarded as a separate entity than what its members are. A share holder of the company is separate and the company is

separate. Any member of the company can not be held responsible for any act of the company.

- Perpetual Succession: The company never dies unless it is wound up according to the provision under companies act. The company continues irrespective of the fact that a member or share holder of the said company dies or goes out.
- Common seal : A company being an incorporated body is provided with a common seal which is the testimony of its existence. Any document authenticated by the seal must bear signature of two directors. Such a document binds the company.
- Transferability of share: The share holders can transfer their share fully or partly to any one of their choice.
- Limited liabilities: The share holders and members of the company have limited liabilities. No personal property of a share holder or member can be made use of for the satisfaction of company's debt beyond the limit of the shareholding or guarantee money.

5 **Cooperative Society :** It is a form of organization wherein the persons voluntarily associate together as human being on the basis of equality for the promotion of economic interests of them selves.

Characteristics:

- Cooperative societies are for economic betterment of weaker section of the society.
- Cooperative societies must be registered under respective registrar of Cooperative societies.
- Liabilities of members are limited. However this can be altered with the permission of the registrar.
- Perpetual existence: Life of the society can not come to an end unless law of the land intervenes.

Features:

- Open but voluntary Ownership: Membership is open to all. But it can be denied if membership of one is likely be prejudicial to the existence of the society. All have equal right whether old or new member.
- Democratic management & control: Members of managing committee or sub-committees are elected by members. Democracy in the society is preserved by holding camps on membership education, frequent meetings of general members, meetings of managing committee and sub-committee.
- Limited interest on capital: As per law dividend on the contributed capital is not allowed to exceed 10%. But some societies do not believe in making payment on capital.
- Equitable distribution of surplus. After the return on capital is allowed if any surplus remains it is equally distributed among the members.

6 **Public Sector Companies:**

- These companies are also governed by Indian Companies Act 1956.
- It is started, owned and managed by Govt.
- Govt. holds more than 50% share.
- In some cases Govt. or a Govt. Agency holds 100% share.
- The main aim of public sector company is to provide goods and services to the public at reasonable rate.

Management

Definition:

- Management is an art of getting things done through other people (J.L. Hoyes)
- Management is a multipurpose organ that manages a business and manages workers and work (Henery Payol).
- Management is knowing exactly what you want men to do and then seeing that they do it in the best and cheapest way. (F.W Taylor)
- Management is defined as the creation and maintenance of an internal environment in an enterprise where individuals working together in groups can perform efficiently and effectively towards the attainment of group goals. (Koontz &O'Donell)

If we analyze the above definitions we can say management is a technique to execute the plan to achieve the goal in an efficient way within the time frame at the least cost.

Difference between Management & Administration:

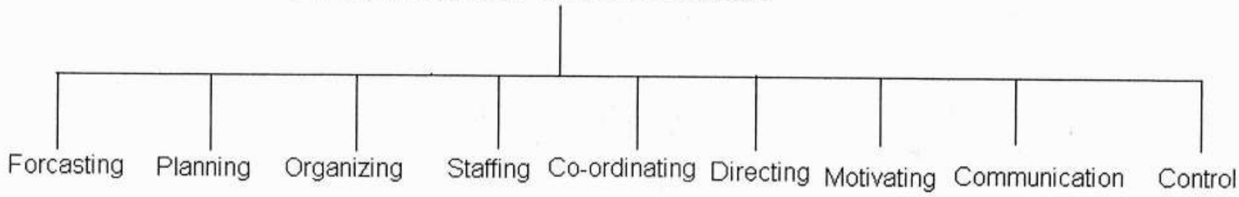
- To a common man they seem similar. But both the terms are different in meaning and application.
- Some say Management is applicable to the field of business only and administration is applicable to non business organizations like schools, colleges, Hospitals, Clubs etc. For them administration is making decision & implementing it.
- Some Management experts say that management & Administration coexist in the same organization. Administration is a top level function which is centered around making major plans, policies and objectives. Where as Management is a lower level function which centers around execution of the plan & policies to achieve the objectives.
- Some management scholars say that administration is a branch of Management. Management is a very broad term which include entire process of planning, policy making, coordinating, maintaining morale & discipline, and controlling the operation to achieve best possible result. But administration is a certain part of management which includes only planning and controlling.

Management vrs Administration

- Applicable to field of business only

- Management is a lower level function which centers around execution of the plan & policies to achieve the objectives.
- Management is a very broad term which include entire process of planning, policy making, coordinating, maintaining morale & discipline, and controlling the operation to achieve best possible result
- Administration is applicable to non-business organizations like schools, colleges etc.
- Administration is a top level function which is centered around making major plans, policies and objectives
- Administration is a certain part of management which includes only planning and controlling.

FUNCTIONS OF MANAGEMENT



- **Forecasting**: Forecasting is the base on which planning and actions are made. Forecasting is analysis of past, study of present and estimate of future. Forecasting may be for short run or for long run. A short run forecast is more accurate than a long run forecast. Long run forecast requires revisions at frequent interval due to change in different factors and forces. Result of forecast must be made available to all the planners to plan the activities suitably.
- **Planning**: Planning is the most important managerial function. Planning is the foundation of out come. Correct and good planning give desired result. Planning involves selection of the best alternative for the entire organization, for each department and section and for each individual.
- **Organizing**: Organizing puts life to planning by bringing together the physical facilities, executives, personnel, workers, Capital, Machineries, Materials, other inputs and services to execute the plan. Organizing creates a structure of functions and duties to be performed by a group for achieving best possible results. It is also a administrative process of works which involves dividing and grouping the work in to various jobs and defining a clear cut relationship among various persons groups, works and jobs.
- **Staffing**: Staffing is nothing but posting of suitable persons at different levels of the organizing structure. Staffing function include recruitment, selection, training, placement, transfer, promotion, personnel administration, compensation etc.
- **Directing**: Directing is entirely a human function which involves managing the managers and workers by means of motivation, proper leadership, effective communication and co-ordination.

- **Motivation**: Without motivation things can not move smoothly. It is to create an internal desire in the mind of the person to do something. It is an important managerial quality.
- **Co-ordination**: It is to achieve harmony and unification of a group of persons directed to wards a common goal. It includes division of work, distribution of duties and accountability among various individuals and groups working in the organizing structure. As defined by Mc. Farland 'The process where by an executive develops an orderly pattern of group of efforts among his sub-ordinates and secures unit of action in the pursuit of a common objective' is called co-ordination.
- **Communication**: Communication is the process of transmission of messages, News, feelings, information, suggestions, instructions and understanding from one person to another. Communication may be through speech, action, chart, graph, diagrams, figures, models, pictures, tables etc. Transmission may be from bottom to top or from top to bottom. It may also be horizontal or side ways. Miss-communication or communication gap may affect achieving the objectives.
- **Control**: It is the last phase of management. It is the means to maintain discipline in almost all activities. Control is essential because planning and performance are never perfect.
- Control involves following steps;
  b) Define the objective of control.
  ii) Determine the strategic points
  iii) Setup the standard performance.
  iv) Measure the actual performance.
  v) Compare the actual with standard
  vi) Find out the deviation and extent of deviation.
  vii) Find out the reasons for deviation
  viii) Decide the corrective measure to be undertaken.
  ix) Plan the corrective measure to bridge the gap between the actual and standard.
  x) Collect necessary resources and create necessary facilities for corrective measures.
  xi) Carry on the corrective measures and keep records of the same for future.

Principles of scientific Management-

'Scientific management is the substitution of exact scientific investigation and knowledge for the own individual knowledge or opinion in all maters relating to the works done in the shop'. (F.W. Taylor)

'The thread of scientific management runs through operational study of work, the analysis of work in to simplest elements and systematic improvement of the worker's performance of each element.

The principles advocated by F.W Taylor are:

- Replacement of old rule of thumb.
- Scientific selection and training of workers.

- Cooperation between labor and management.
- Maximization of output
- Equal distribution of responsibilities

  Replacement of old rule of thumb: Decision making must not be based on tradition, convention, opinion, institution. Decisions should be taken after proper investigation, evaluation and study of facts and consequences. Behind every work there must be scientific reasons duly justified for the purpose.

- **Scientific selection and Training of workers**: The principle involves selection of right person for right job and providing them with proper training. The selection process should be designed in such a scientific manner so that the best suited workers are selected for the job. The selection process involves various types of tests by experts to create efficiencies everywhere. Scientifically trained persons are to be placed at proper places to avoid wrong doing or improper work.
- **Cooperation between labor and management**: Cordial relation between the labor and management is most important for success of any organization. So the principle of management gives much emphasis on this aspect. The spirit of cooperation can not be achieved unless there is a change in attitude of the management and the workers. This is known as mental revolution. The principle of cooperation is aimed at increasing i) Production, ii) Mutual trust and cooperation, iii) Developing and applying scientific attitude towards problems.
- **Maximize out-put** : Time study and motion study are two important ingredients in scientific management in any production organization. The aim is to maximize production at minimum possible cost.
- **Equal distribution of responsibilities**: There must be proper distribution of responsibilities among managers and workers. Managers should decide the method, time of start and finish of the work. The workers should be made responsible for execution of work as per instruction and achieve the result. Top management should be responsible for panning, organizing, staffing, directing, controlling etc. Middle level persons like supervisors may be made responsible for realization of target in the manner prescribed.

Organization structure

- 'Organization is the process of identifying or grouping the works to be performed, defining and delegating responsibilities and establishing relation ships for the purpose of enabling the people to work most efficiently together in accomplishing objectives' (Allen)
- 'Organization is the process of combining the works which individuals or groups have to perform with facilities necessary for the execution. The duty so performed provides the best channel for efficient, systematic, positive and correlated application of available efforts.' (Seldon)
- Organization structure: It acts as a channel for achieving organizational goal.
- Steps for deciding a specific structure:

b) **Activities analysis**: A Job is the basic binding block in designing an organization structure.

ii) **Decision analysis**: The foreseeable decisions to be taken at different levels will require a degree of authority and responsibility.

iii) **Relation analysis**. The relationship between superior-subordinates, line and staff, upward, downward, sideways relations must be analyzed & determined .

Role of organization structure & steps for its design

- Encourages efficiency
- Communication
- Optimum use of resources
- Job satisfaction.
- Creative thinking
- Facilitates management

Steps for designing an organization structure.

- Identifying Activities
- Grouping of Activities
- Delegation of authority.

Types of organization structure-

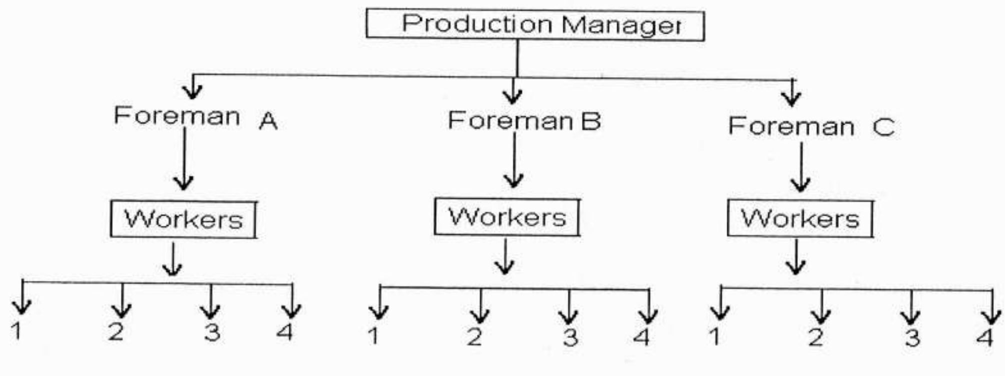
The following are some of the important types of organization.

b) Line Organization
ii) Functional or Staff organization
iii) Line and Staff organization
iv) Project organization
v) Committee type Organization
vi) Task Force organization
vii) Divisional organization
viii) Matrix organization
ix) Free form organization
x) Team type organization
xi) Virtual organization.

Line organization is of two types:

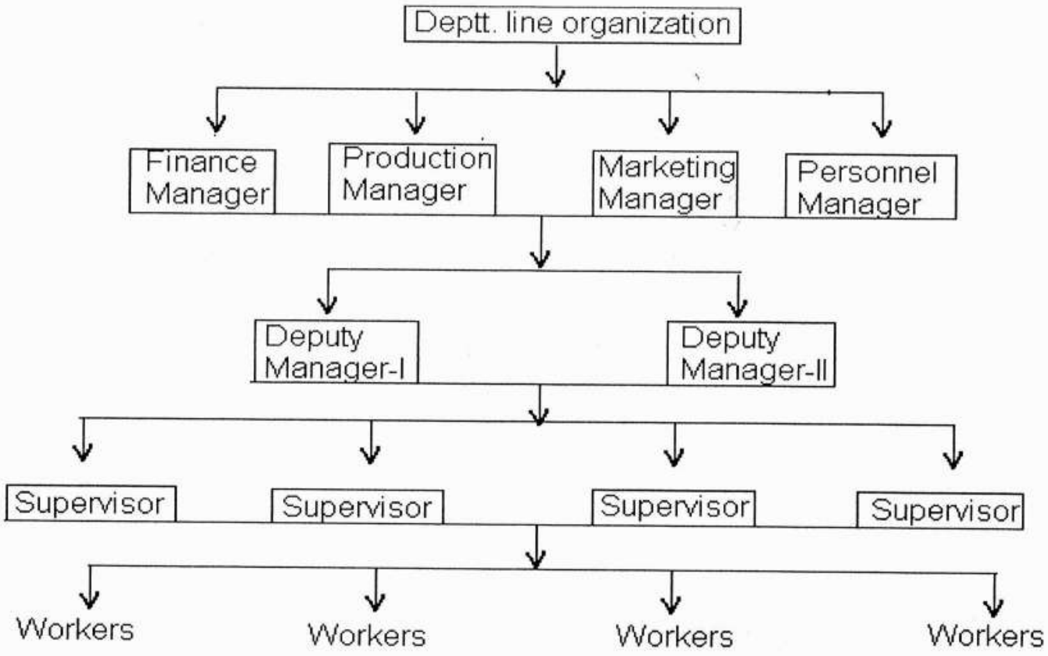
a) Pure Line organization, b) Departmental line organization.

PURE LINE ORGANIZATION:



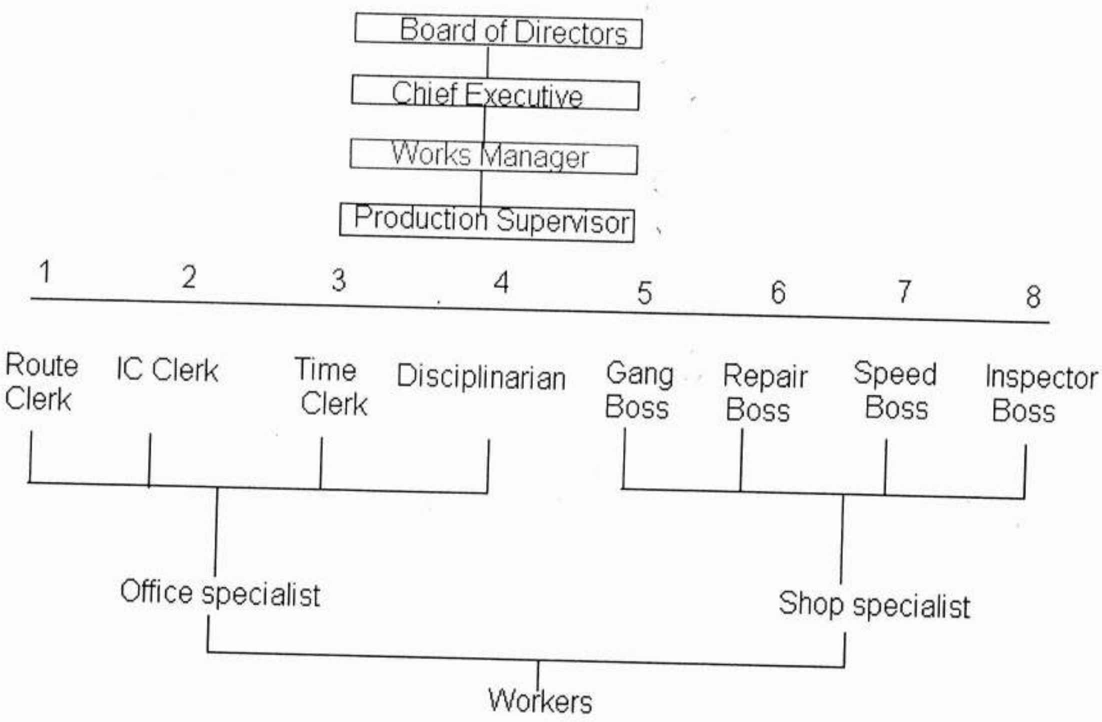
In a pure line organization all persons at a given level perform the same type of work. The divisions are solely for control and direction.

b) Departmental line organization-
The enterprise is divided in to different departments and each department has its line of organization. The line of authority flows from top to bottom.



Merits of line organization: i) Simple ii) Identification of authority & responsibility iii) Coordination iv) effective communication v) Economical vi) Quick decision vii) Unit of command viii) Effective control & supervision ix) Executive development x) Flexibility.
Demerits of line organization: i) Excess work ii) Lack of specialization iii) Lack of coordination, iv) Improper communication v) Lack of initiative vi) Favoritism vii) Instability.

Functional or Staff Organization:



F.W Taylor suggested the division of supervisory functions into two groups. i) Office specialists ii) Shop specialists.

i) **Office specialists**: Their responsibilities are design, scheduling, recording and planning etc. The staff consists of :

- Route Clerk : Responsible for planning the route from machine to machine. He schedules the work in such a way that the finished goods are ready in time.
- Instruction card clerk : Exact method of doing the work is recorded by him.
- Time and cost clerk: He is responsible for cost and time control and recording.
- Disciplinarian: He is responsible for implementation of various rules and regulations and also maintaining discipline at work.

(ii) **Shop Specialist**: They guide and supervise the work in the factory. They consists of :

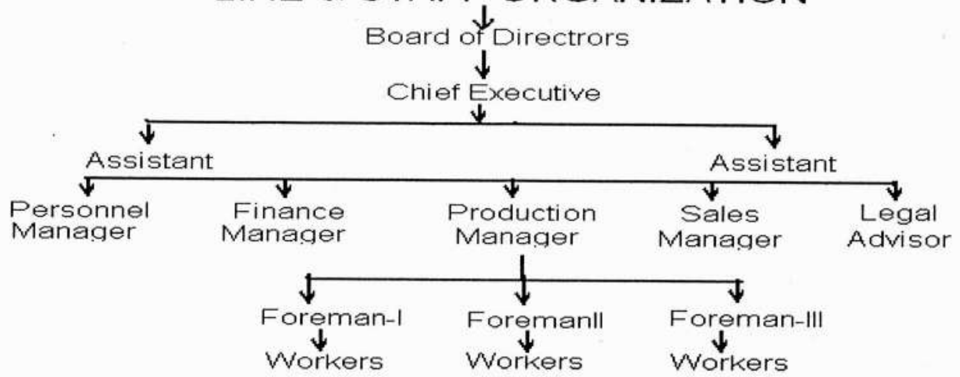
- Gang boss: He arranges proper tools and machineries at work and ensures adequate work.
- Speed boss: He controls the progress and ensures completion at standard time.
- Repair boss: He is to ensure that tools and machineries are maintained, cleaned by workers and are in working condition.
- Inspector : He ensures the standard and quality.

Line and staff organization:

In order to eliminate the disadvantages of both line and staff organizations a combined organization called 'Line & Staff organization' came into practice. Line refers to those positions and elements of the organization which have the responsibility and authority and are accountable for the accomplishment of primary objectives. Staff elements are those which have responsibility and authority for providing advice and service to the line in the attainment of the objectives.

- Type of Staff: i) Personnel ii) Specialists iii) General.
- Functions of staff authority : i) Agency of control which includes organization, cost, audit & accounts, budget, personnel etc. ii) Agency coordination which includes planning, order and distribution, production planning, communication etc iii) Agency of service which includes R &D, personnel training and development, Statistical analysis etc. Iv) Agency of advice : this includes legal, public relation, Labor relation. Economics etc.

LINE & STAFF ORGANIZATION



Project Organization: To take up any project inside or outside the organization a project organization, headed by a project manager is formed by drawing people from various functional deptt. of the organization.

Committee Organization: Whenever there is any problem in an organization a committee is formed to look into the problem and give solution. The members are usually taken from outside but one member is taken from inside. This is an independent body.

Task-Force organization: Whenever a particular work is not possible by the regular work force, a Task force is formed on temporary basis by taking experts from various functional departments and outside. The Task force is given lot of power for decision making to achieve the task.

Divisional organization: If a company produces different products or provides different services he may have different divisional organization for different groups of products or services.

Matrix Type organization: When a company takes up large number of projects at different sites with a specific time limit, it adopts this type of organization. Instead of appointing separate experts for each site, it appoints experts in each field and utilizes them in different sites as and when required.

Free-form organization: Here there is no hierarchy of relations. All have the same status. This type of organization is found in research houses, Product development centers, Laboratories etc.

Team Organization: Whenever a task is to be performed on long term basis a team is formed in the organization by taking experienced staff from various branches to do the team work.

Virtual Organization: Now a days companies having similar business activities join hands temporarily and form a virtual group to take advantages of business opportunities.

Delegation of Authority-

- It plays an important role in an effective organization structure
- It is the process by which bosses are created.
- It grants authority from superiors to subordinates to accomplish a particular assignment..
- Through delegation process master multiplies himself and gets the work done through others.
- Delegation extends the area of operation of an individual beyond his limit.

Responsibility.

- It is the duty assigned to a person.
- It is the obligation of the individual to achieve the result.
- It arises basically from superior subordinate relationship..
- As far as practicable authority should be at par with responsibility.
- Authority can be delegated but ultimate responsibility can not be delegated.

Principles of sound organization structure.

- **Attainment of objective**: : Efforts of all individuals or groups should be united and directed to attain the goal or objective of the enterprise.
- **Division and distribution of work**:: The main work should be divided into sub-works, jobs and activities and are to be distributed to various persons or groups depending upon their capabilities.:
- **Personal abilities** : A good organization correctly assess the ability, skill and talent of each person and assigns the job for best utilization of human resource to maximize the output.
- **Specialization**: A good organization tries to achieve specialization in all its activities. Specialization can be achieved by doing a work repeatedly. So persons allotted with a job should not be transferred to another job.
- **Co-ordination**: There should be good coordination among all groups, branches and sections. Otherwise desired result cannot be achieved.
- **Efficiency** : A good organization aims at good efficiency at all levels by effectively utilizing the available resources. Efficiency increases cost reduces.

Delegation : Delegation multiplies a person. According to position and ability delegation of authority gives timely results at different levels. A good organization is not possible without proper delegation.

- **Authority & Accountability** : Authority and accountability go side by side. Without accountability authority has no meaning. For getting the work done as per scheduled time and specified quality this principle is essential for an organization.
- **Definiteness**: In an organization all sub-works or groups should have definite link or relation to the main work of the organization.
- **Unit of command**: A sub-ordinate is responsible to his boss. He receives orders and instructions from his boss only and performs accordingly. There should not be direct interference from others in the organization.
- **Span of control**: One executive can not supervise the works of unlimited persons. So in a good organization span of control should not exceed 6 persons.
- **Balance**: In an organization there should be perfect balance among power, authority and responsibility.
- **Flexibility**: A sound organization should provide flexibility at every stage to tackle changing environments or meet the future needs.
- **Exception** : For small and petty matters the lower level of the organization should be competent. The higher level authorities are for big matters.
- Communication : A good organization should have sound communication system for smooth flow of information, instruction and understanding among various persons of the organization.
- **Scalar chain**: All persons working in the organizing structure should be linked to one another like a chain so that authority and command flow from top to bottom.

Entrepreneurship -
Definition & Meaning

- Entrepreneurship = Entrepreneur + Enterprise.
- Enterprise is the business organization.
- Entrepreneur is the owner of the enterprise.
- According to J. Schempeter 'It is a creative activity, the entrepreneur being a innovator, who introduces something new into the economy, a new method of production not yet tested by experience in the branch of manufacturing concerned, a product with which the consumers are not familiar, a new source of raw material, or of new market hitherto unexploited and of similar innovation.'

Entrepreneurship characteristics

The characteristics can be divided into three broad groups. i) Traits (Distinguished features), ii) Qualities and iii) Abilities.

- **Traits :** These include Initiative, Concern for quality, Urge to take calculated risk, seeing and acting on opportunities, Urge for solving problems, Planning, Assertiveness, Self confidence, Commitment to work contract, Efficiency oriented, Risk taking, Leadership, Task & result oriented, Originality, Sense of responsibility, Time management & Future orientation

- **Qualities:** These include: Self confidence, Competitive spirit, Ego involvement, Ego strength, Risk taking, Decision making, Independent thinking, Desire for unique production, inner directiveness, Managerial skill, Organizing abilities, Intelligence, Emotional tolerance, Achievement oriented, Visualization ability, Goal directed thinking, Per suability, Conflict resolving, Imaginative thinking, Sensitive to problems, Budgeting abilities, Non-conformist, Popularity, Reality oriented, Cooperative, Communicability, Observational abilities, Reasoning abilities, Quality control capacity and High motivation.
- **Abilities:** Controlling, Planning, Directing, Managing, Self exceeding, Deciding, Coordinating & integrating, Demonstrating, Evaluating, Counseling, Organizing, Motivating, Innovating, Supervising, Sensing problems, Visualizing, Conflict resolving, Dictating, Investing capital, Risk taking, Knowledge on labor law, Accounting knowledge, Result orientation, Knowledge on Tax rules.

Characteristics in Indian condition

Achievement oriented, Risk taking attitude, Need to influence others, Abilities to sense opportunities, Positive self concept, Level of expectation, Initiative, Inclination to accept challenges, Independent thought and action, Problem solving attitude, Inclination to search environment, Time boundness,
Sense of dissatisfaction, Result orientation, Influence to get through bureaucratic red tapism, Financial soundness.

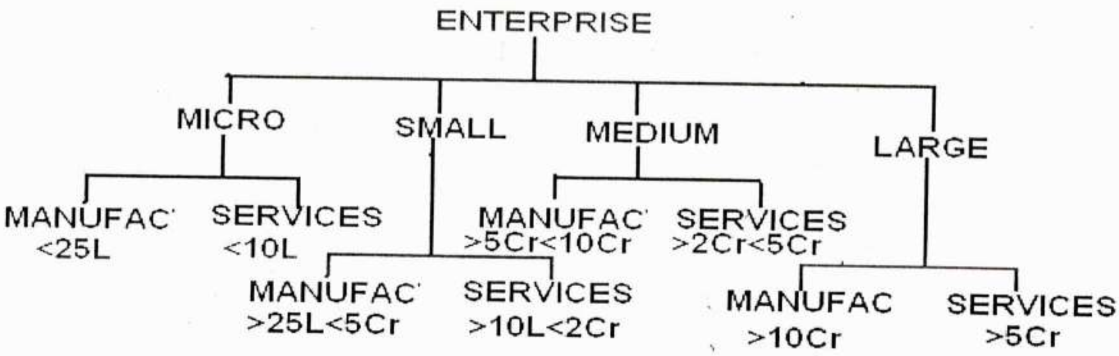
Role of Entrepreneur in industrial development:

- Creates entrepreneurial culture in the society. An entrepreneur's success creates interest in others to be another entrepreneur.
- Provides good and services to people or other industries at competitive rate and in time.
- Supplies components, parts ,assembling, sub-assembling to other industries for manufacturing of useful products.
- Small entrepreneurs utilize various raw materials lying scattered through out the country in small quantities and produce useful product. Otherwise they would not have been utilized.
- Entrepreneurs establish their unit in their locality. So the industries are scattered evenly through out the country.
- Entrepreneurs usually start small units and produce goods and services at competitive rates. Hence they restrict the monopolistic activities of big business houses.
- Establishment of industries at different places creates a balanced economic growth for the various regions of the country. Consequently Social and economic development of the people of the area takes place.
- Entrepreneur is self employed but he creates employment opportunity for the local people & others.
- Ancillary industries and business come up around the Main industry.

Classification of enterprises:

Classification Industries as well as the financial limits for each class have been changed from time to time by the Government. The present classification is : i) Micro enterprises, ii) Small enterprises, iii) Medium enterprises, in short **MSME** and iv) Large enterprises. The enterprises may be either manufacturing or services.

- **Micro enterprises : (Manufacturing)**
- The amount of investment in plants and machineries does not exceed Rs.25 lakhs.
- While calculating the value of plant and machineries, the original amount paid by the owner is considered irrespective of the plant and machineries are new or second hand.
- Definitions-
- The cost of tools, tackles, moulds, dies, spares and consumables are not taken into accounts.
- Installation cost, land and building costs, cost of generating sets if any etc are excluded.
- **Micro enterprises : (Services)** In this sector the amount of investment in equipments does not exceed Rs.10 lakhs.
- **Small Enterprise (Manufacturing) :** The amount of investment in plants and machineries is more than Rs.25 lakhs but less than Rs.5 crores. The exclusions for calculation of investment are the same as mentioned under Micro enterpriser (Manufacturing).
- **Small Enterprise (Services)** :. The amount of investment in equipments is more than Rs.10 lakhs but less than Rs.2 crores.
- **Medium enterprise (Manufacturing)** : The amount of investment in plants and machineries is more than Rs.5 crores but less than Rs.10 crores. The exclusions for calculation of investment are the same as mentioned under Micro enterpriser (Manufacturing).
- **Medium enterprise (Services)** The amount of investment in equipments is more than Rs.2 crores but less than Rs.5 crores.
- **Large enterprise (Manufacturing) :** The amount of investment in plants and machineries is more than Rs.10 crore. The exclusions for calculation of investment are the same as mentioned under Micro enterpriser (Manufacturing).
- **Large enterprise (Services)** The amount of investment in equipments is more than Rs.5 crores



Features of Small enterprises

- They are registered under the District Industries Centre (**DIC**) of the district where the enterprise is located or going to be located. They are registered under the respective State Govt. rules and regulations as amended from time to time.
- The investment in plant and machineries range from 25 lkh rupees to 5 crore rupees for manufacturing units and from 10 lakh rupees to 2 crore rupees for service units.
- They operate as per the rules & regulations of the respective state govt. as notified from time to time in their Industrial Policy Resolution (**IPR**).
- They are eligible for all the concession/ incentives/ subsidies/ benefits as per the policies of the respective state Govt. issued from time to time as applicable to the particular enterprise.
- Large scale formalities are not required to start a small enterprise. In some special cases license, permission, clearances are required.
- The volume of production of goods in case of small enterprise is less compared to medium or large enterprises.
- Size of small enterprise is usually small due to limited investment and limited production of good or services.
- They are labor intensive but they employ small numbers of workers.
- The area of operation of small enterprise is small and confined to locality or region baring a few cases who operate nationally or export to other counties.
- They usually employ local people, locally available raw materials and use domestic technologies. Very few import raw materials, components, technologies etc.
- They are confined to Industrial estates or industrial area earmarked by state govt. or nearest to source of raw materials or markets.
- The ownership is usually confined to a single entrepreneur or members of the family or a small partner basis. It may be a private ltd. Company.
- The entrepreneur of SSI invests his own money but a large portion is in form of loan from Banks and/or Financial institutions.

Module # 2

- Input setting for small Enterprises
- Institutional support(Financial and Non-financial support)
- Account
- Different Types of account
- Book keeping
- Journal
- Rules for journalizing
- Ledger
- Trial balance
- Cash book
- Petty cash book
- Balance sheet
- Assets
- Different Types of Assets
- Cost and its elements
- Cost sheet
- Break Even Point(BEP)
- BEP Analysis
- Purchasing
- Inventory control
- Different store record
- Goods Received Note(GRN)
- Capital
- Types of Capital
- Components of working capital
- Operating cycle
- Production Management
- Production planning and control
- Sales and marketing management
- Product policy
- Human Resource management
- Recruitment
- Different source of recruitments
- Industrial sickness
- Causes of industrial sickness

- Loans at lower interest rate and easy repayment scheme.
- Soft working capital loans
- Reduced electricity tariff.
- Water tax concession
- Lower royalty
- Tax holidays
- Sales tax concession
- Concession in Excise duty
- Technical support from Govt. organizations for import of plant and machineries, raw materials or technology etc.
- Single window clearance for all problems of small enterprises.
- Small enterprise is exempted by Central Govt. to provide collateral security for loans up to 5 lakhs rupees.
- Credit facilities to small enterprises through credit Guarantee Scheme is available from Central Govt. Also Credit linked capital subsidy has been created to provide financial help for up gradation of technologies.

Input for setting up a Small enterprise -

Entrepreneur Training: An intending entrepreneur may not have all the qualities, characteristics, skill and talent needed for a successful entrepreneur. So he has to be given adequate training :

- To motivate, strengthen and develop entrepreneurial skill, qualities and abilities.
- To facilitate and accelerate the process of becoming a good entrepreneur by appropriate selection of business opportunity and subsequent formulation and implementation of a new unit.
- To create confidence in the entrepreneur through exposure to present business and industrial problems and procedures and enabling him to foresee and plan.
- To successfully manage the unit and ensure all round development. He should be given sufficient inputs like behavioral input, business opportunity input, information and project report preparation input, managerial input, technical input. Finance, accounts and costing input, Legal matters, Sales, Marketing , advertising , Collection and analysis of information for decision making, Production, Planning and control.
- Visit to similar projects : The entrepreneur must visit similar projects to gain practical knowledge on different aspects of the project and their functioning. By the by he must see some sick industries and find out the reasons for their sickness.
- Interaction : He must interact with successful entrepreneurs to know about the story behind their success.
- Other inputs required : The entrepreneur once becomes confident and trained, other inputs like finance, technology, machineries, infrastructure etc can be collected or

arranged by him. Besides he may go for some input training on i) behavior, ii) identification of business opportunity, iii) Project report preparation, iv) finance accounting and costing, v) legal matters, vi) sales, marketing, & advertising, vii) different aspect of management, viii) collection and analysis of information for decision making, and ix) production, planning and control.

Institutional support to SSI at state and national level

To assist and encourage the entrepreneurs and for the growth of industries both state and central govt. have institutional support.

Institutional support

- Both Union and state Govt. have constituted and established many types of institutions and boards who will extend different types of assistance to the entrepreneurs to solve their problems.
- Some agencies provide general information about different projects, some provide technical and marketing assistance, some provide technical and financial assistance and help in implementation of the project.
- There are different publications from different organizations to help the entrepreneur to collect a lot of information for his project
- Now-a-days all information are available on Internet.
- From time to time Govt. arranges different **EDP (**Entrepreneur-ship Development Program) and workshops for benefit of the entrepreneur.

Institutions for financial supports. Every state has State financial Corporations (SFC), We have Orissa State Financial Corporation (OSFC), Besides all commercial Banks Like SBI, Andhra Bank, Punjab National Banks, Union Bank etc. also provide financial supports.

List of other institutions for financial support:

SIDIBI : Small Industries Development Bank of India.
IDBI Industrial Development Bank of India
NABARD National Bank for Agriculture &Rural Development
ICICI Industrial Credit & Investment Corporation of India.
DICGC Deposit Insurance & Credit Guarantee Corporation.
CGFT Credit Guarantee Fund Trust for Small Industries.
NSIC National Small Industries Corporation.

None financial support:

DIC : District Industries Centre : They provide all required information regarding policies and guide and give training.
OSIC : Orissa Small Industries Corporations : They provide technical support and assist in procurement of raw materials and machineries.
IPICOL : Industrial Promotion & Investment Corporation of Orissa Ltd. They provide single window clearance, provide industrial consultancy.
IDCO : Industrial Development Corporation of Orissa They provide the infrastructures and develop industrial estates where entrepreneurs can establish their units.
SIDO : Small Industries development of Origination.
NSIC National Small Industries Corporation.
KVIC Khadi & Village Industries Commission.
MSME Micro, Small and Medium Enterprises.

CED Centre for Entrepreneurship Development.
NRDC National Research Development Corporation
MSMEDI Micro, Small & Medium Enterprise Development Institute.
Besides above there are national level and state level govt. institutions for providing specialized services on specific fields.

Different types of Accounts -

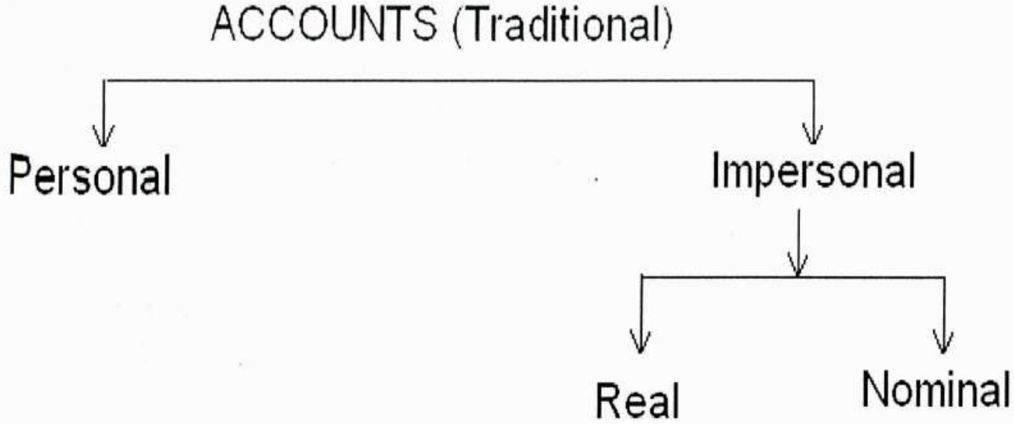
Account:: An account is a summary of relevant transactions at one place relating to a particular head. Accounts maintained by a business are of two types. i) Equation based, and ii) Traditional. The classification of accounts is shown bellow:

Type	Meaning	Example
(a) Asset A/c	Relates to tangible or intangible real assets	Land, buildings, cash goodwill, patents
b) Liabilities A/c	Financial obligation to outsiders.	Trade creditors, Outstanding expenses, Bank overdraft, long term loans
c) Capital A/c	Owners' account	Capital A/c, Drawing A/c
d) Revenue A/c	Amount charged for goods or services sold or permitting others to use enterprise's resources yielding interest, royalty or divided.	Sales A/c, Discount received A/c, Divided received A/c, Royalty receipt, Interest receipt etc A/cs.
e) Expenses A/c	Amount incurred or lost in the process of earning revenue	Purchases, Discount allowed, Royalty paid, Interest payable, Loss by fire

Equation based :

The rule for this is that for each transaction debit amount must equal to credit amount. The equality of debits and credits can be expressed in form of an equation. Debit = Credit , and asset – Liability = Proprietor's capital.

Traditional



i) Personal A/c : It refers to all accounts of different persons, other companies, banks, LIC etc. with whom the business has credit transactions both credit sale and credit purchase, including loans and borrowings.

ii) Real A/c : It refers to all real things which are visible and tangible such as cash, Machineries, Buildings, Materials, furniture, Finished goods, Tools & plants etc.

iii) Nominal A/c : It refers to all accounts related to different incomes and expenditures, losses and gains. These items are not visible or tangible like rent, interest, salary, commissions etc.

Again each category of account can be divided head wise into a number of accounts like salary account, Bank account, Loan account, Cash account, Interest account, raw material A/c, Finished goods A/c etc.

Book keeping: Maintenance of records of all financial transactions is known as book keeping.

Double entry system : It is the method of arranging accounts in such a way that the dual aspect (present in every account transaction) would be expressed by a debit amount and an equal & offsetting credit amount.

Features of double entry system:

i) Two parties: One receiving the benefit the other parting with the benefit.

ii) Each party is affected in opposite direction but with the same amount.

iii) Each transaction affects at least two items in an accounting equation. Accounting equation is composed of three elements namely Assets, liabilities and Capital.

iv) Changes are recognized from the angle of the party in whose books recording is being done.

v) Changes are recorded in two related accounts in books of party.

vi) Account receiving the benefit is debited i.e recorded in the left hand side and the account rendering the benefit is credited i.e recorded on the right hand side.

vii) Each account has two sides left debit and right credit.

viii) For each transaction debit amount is equal to credit amount.

CED Centre for Entrepreneurship Development.
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d) Revenue A/c	Amount charged for goods or services sold or permitting others to use enterprise's resources yielding interest, royalty or divided.	Sales A/c, Discount received A/c, Divided received A/c, Royalty receipt, Interest receipt etc A/cs.
e) Expenses A/c	Amount incurred or lost in the process of earning revenue	Purchases, Discount allowed, Royalty paid, Interest payable, Loss by fire

Advantage of double entry system:

i) It enables to keep a complete record of business transactions.
ii) Provides a check on arithmetical accuracy of book of accounts
iii) It gives the results of business either profit or loss during the accounting period.
iv) It tells the financial position of the business at a point of time. Total resources of the business, claims of the outsiders, amount due to outsiders etc.
v) It makes possible comparison of the current year with those of previous years helping the owner to improve.
vi) It reduces the chances of error because of its duality principle.
vii) It helps to ascertain the details regarding any account easily and accurately.
viii) It helps ascertaining cost of production by preparing Manufacturing account in case of manufacturing business.
ix) Profit disclosed is shown under the heading Gross profit & Net profit.
x) Distinction between gross profit and net profit help in administering effective control system.
xi) Financial statements prepared are the basis of determining tax liability of the business
xii) Calculation of abnormal loss due to loss of stock on account of various factors like accident, fire etc helps in filing claims with insurance company.

Disadvantages

i) Expert knowledge is required
ii) Lengthy and cumbersome process
iii) Expensive –Account department is required
iv) Uneconomical for small business entity.

Rules of Debit & Credit for Equation Based (i)

Type of A/c	Rule	Debit	Credit
Assets	1	Increase (+)	Decrease (-)
Liabilities	2	Decrease (-)	Increase (+)
Capital	3	Decrease (-)	Increase (+)
Revenue /Profit	4	Decrease (-)	Increase (+)
Expenses /Losses	5	Increase (+)	Decrease (-)

Rules of Debit & Credit for Traditional (ii)

(1) Real A/c ;- Debit- what comes in; Credit – What goes out
(2) Personal A/c:- Debit –The receiver; Credit – The giver
(3) Nominal A/c- Debit-All expenses; Credit- All incomes and gains.

Application of Rules of debit & credit-

Q-1

Rs.

i) Mohan commenced business with cash (A-P/R-P) 70,000

ii) Purchased goods on credit from Sohan (A-L/R-P) 14,000

iii) Paid wages (E-A/N-R) 500

iv) Paid to Sohan L-A / P-R 10,000

v) Purchased furniture (A-A /R-R) 1,000

vi) Goods stolen by storekeeper (E-A/N-R) 200

vii Received commission (A-R/R-N) 100

Solution

SN	Explanation	A/c involved	Equation based			Traditional			Dr	Cr
			Group	Effect	Rule	Group	Effect	Rule	Rs.	Rs.
1	Business Cash Rs.70,000	Cash Capital	A P	+ +	1 3	R P	Come in Giver	2 1	70,000	70,000
2	Goods from Sohan on credit Rs. 14000	Goods Sohan	A L	+ +	1 2	R P	Come in Giver	2 1	14,000	14,000
3	Paid wages Rs. 500	expense Cash	E A	+ -	4 1	N R	Expense Goes out	3 2	500	500
4	Paid to Sohan Rs.10,000	Sohan Cash	L A	- -	2 1	P R	Receiver Goes out	1 2	10,000	10,000
5	Cash Purchase furniture Rs.1000	Furniture Cash	A A	+ -	1 1	R R	Comes in Goes out	2 2	1000	1000
6	Goods stolen Rs.200	Loss Goods	E A	+ -	4 1	N R	Loss Goes out	3 1	200	200
7	Receipt Rs.100 commission	Cash Commission	A R	+ +	1 5	R N	Come in Income	2 3	100	100

Form of Account -

Dr .....(NAME OF THE ACCOUNT)........ LEDGER FOLIO No. .... Cr

Date	Particulars	J.F	Amount Rs.	Date	Particulars	J.F	Amount Rs.

Journal : It may be described as a book in which the transactions are recorded chronologically. It is called a book of prime entry or original entry because all business transactions are entered first in this book. The journal has two functions: i) Analyze transactions into debit and credit so as to enable their posting in the ledger. Ii) To arrange transactions in order of date.

Ruling of the journal:

Date (1)	**Particulars (2)**	**L.F (3)**	**Amount**	
			Debit (Rs) (4)	Credit (Rs) (4)

Steps for journalizing

- Ascertain what account are involved in the transaction
- Identify the nature of account involved
- Identify which A/c is to be debited & which is to be credited by applying debit credit rules
- Record the date of transaction in col .(1)
- Write the name of A/c to be debited very close to the left line of separation along with abbreviation 'Dr.' on the same line against the name of A/c in Col.2 and the amount debited in the col.4 in the same line.

- Write the name of the account to be credited in the next line preceded by the ward 'To' at a few spaces towards right in col.2 and the amount to be credited in col.5 against the account name.
- Write brief description of the transaction within brackets in the next line in col.2 beginning with the ward 'Being'.
- Draw a line all along the col.2 to separate the next entry.

Characteristics of journal

- It is a book of original entry.
- It is the first step in the recording process of double entry system of book keeping.
- It is known as a day book as transactions are recorded in it on day to day basis as and when they occur.
- It is a chronological record of all transactions.
- Every entry in journal is accompanied by narration which briefly indicate nature and context of the transaction
- The transaction is recorded in both debit and credit columns side by side which helps arithmetic check.
- Journal & ledger are inter related because the next step is ledger.

Advantages of journal-

- Transactions recorded date-wise with explanation.
- Process of classification at convenience.
- Ensures that double entry rules are followed.
- Reliable evidence.
- Sub-division enables division of labor.
- Detection of arithmetical errors.
- Provides primary source of data.

Ledger

- It is the principal and most important book in accounting system.
- It contains all the accounts (Assets, Liabilities, capital, revenue and expenses) to which the transactions recorded in the journal are posted.
- It is the book of final entry because ledger is the final destination of all transactions.
- In ledger information is classified by nature and relevance.
- It may be maintained in bound book or loose leaf sheets or CDs.

Process of recording information in ledger

- Transactions relating to one account over a period are identified from the journal in the chronological order.

- Transactions identified are recorded at one place called account.
- This gives rise to summarized and classified information relating to each particular account at one place.
- Each account is divided into two parts Left or Dr. right or Cr. Amount debited to a particular account in journal is posted in debit side of the account concerned and amount credited to a particular account in the journal is posted on the credit side of the account concerned.
- When ever desired two sides are totaled and the difference known as balance is ascertained. Such balance provide us the ready information regarding the particular account on a particular date.

Information provided by ledger:

- Debtors and creditors : Debit balance in personal account shows us how much the person owes to the business and credit balance shows how much business owes to the person.
- Continued -
- Purchases, Sales, Returns etc: Value of cash purchase and credit purchase can be known from purchase account on a particular date. Similarly value of sales, return inwards, return out wards etc can be found out by balancing the particular amount.
- Type of assets and value of each assets: Different types of assets like land, building, machinery, furniture etc are given separate accounts from where value can be known.
- Expenses and income : Each nominal account representing separate expenditure and income head is opened separately in the ledger like salary, wages, rent, interest, dividend etc.
- Cash and bank balance : This is ascertained at the end of every day by balancing the concerned account.

Accounts

The statement which records the transactions at one place relating to a particular subject is known as accounts. The book which contains the account is ledger and the procedure of writing the accounts is known as posting.

- Ledger account forms-

  Form I – Running (balance) form, followed in those cases where balance is required to be ascertained after every transaction e.g. Banks

Dr **..... (Name of Account) .... Ledger folio No. ...** **Cr**

Date	Particulars	Folio	Debit Amount Rs.	Credit Amount Rs.	Dr –Cr	Balance

Form- II - T-Form: followed where balance is to be ascertained only periodically. For our purpose we shall use this form.

Procedure of posting for an account which has been debited in a transaction.

- With the help of an index open the page where the concern A/c appears.
- Enter the date of transaction on debit side.
- Record the name of the account credited in the journal in particular column in debit side as:-

'To.... (name of account credited)

- Record the page No of the journal in the J.F column in debit side and in the journal write the page no. of ledger on which a particular A/c appear in L.F column.
- Enter the relevant amount in debit side.

Procedure of posting for Credit transaction.

- Open the ledger page of concern account.
- Enter date
- Record the name of Account debited in journal 'By.....(Name of A/c debited)
- Record the page no. of journal in ledger and ledger page no. in journal.
- Enter relevant amount in credit side.

Example Consider the following transaction :
Amar started business on 1st Jan with Rs.20,000., The above transaction should be recorded in journal :

Journal entry

Date	**Particulars**	**LF**	**Amount (Rs. Dr.**	**Cr.**
Jan 1	**Cash A/c Dr** **To Amar's Capital A/c**		**Rs. 20,000**	**Rs. 20,000**

Ledger entry (Illustration)

Dr CASH ACCOUNT LEDGER FOLIO No. .... Cr

Date	Particulars	J.F	Amount Rs.	Date	Particulars	J.F	Amount Rs.
Jan 1	To Amar's capital A/c		20,000				

Dr AMAR'S CAPITAL ACCOUNT LEDGER FOLIO No. .... Cr

Date	Particulars	J.F	Amount Rs.	Date	Particulars	J.F	Amount Rs.
				Jan 1	By cash A/c		20,000

- Amar started business with Rs.10,000 (Amar (P) giver (Cr), business cash (R)comes in (Dr) ,)

ii) Out of the above Rs.2,000 is deposited in the bank. (Cash (R)goes out, Bank (P) receiver

- Purchased furniture for cash worth Rs.1,000 (Cash out, Furniture (R)comes in)
- Purchased goods for cash Rs.1,500 (Goods (R)come in, Cash out)

v) Purchased goods from Birendra on credit for Rs. 2000 (Goods come in, Birendra giver)
vi) Sold goods for cash Rs.3,000
vii) Sold goods on credit toi Chetan Rs. 3,500
viii)Received cash from Chetan Rs.3,430, Allowed discount Rs.70
ix) Paid cash Rs.1950 to Birendra for full settlement of his bill
x) Paid salary for Rs.300
xi) Received commission Rs. 100
Xii Charged depreciation for full year on furniture @10%

Journalizing-

1	**Cash account Dr** **To Amar's Capital A/c** **(Being the commencement of business)**		**10,000**	**10,000**
2	**Bank account Dr** **To Cash A/c** **(Being cash deposited in bank)**		**2000**	**2000**
3	**Furniture A/c Dr** **To Cash A/c** **(Being the cash purchase of furniture)**		**1,000**	**1,000**
4	**Purchase A/c Dr** **To cash A/c** **(Being cash purchase of goods)**		**1500**	**1500**
5	**Purchase A/c Dr** **To Birendra's A/c** **(Being purchase on credit)**		**2000**	**2000**
6	**Cash A/c Dr** **To sale A/c** **(Being cash sale of goods)**		**3000**	**3000**

7	Chetan A/c Dr To Sales A/c (Being Credit sale of goods to Chetan)		3500	3500
8	Cash A/c Dr Discount A/c Dr To Chetan A/c (Being cash receipt and discount allowed)		3430 70	3500
9	Birendra A/c Dr To Cash A/c To Discount A/c (Being cash payment in full settlement)		2000	1950 50
10	Salary A/c Dr To Cash A/c (Being cash payment of salary)		500	500
11	Cash A/c Dr To commission A/c (Being receipt of commission)		100	100
12	Depreciation A/c Dr To furniture A/c (Being depreciation on Rs.1000 @10%)		100	100

Ledger posting

Cash A/c

Dr Cr.

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
1	To Amar's Cap. A/c	65	10,000	2	By Bank A/c		2,000
6	To sales A/c		3,000	3	By furniture A/c		1,000
8	To Chetan A/c		3,500	4	By purchase a/c		1,500
11	To commission A/c		100	9	By Birendra a/c		2000
	To balance b/d			10	By salary a/c		500
			16,600		By balance c/d		9,600
			9,600				16,600

Amar's capital A/c

Dr Cr

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
1					By cash A/c		10,000

Bank A/C

Dr. Cr.

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
2	To cash A/c		2000				

Furniture A/c

Dr. **Cr.**

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
3	To cash A/c		1000	12	By depreciation a/c		100
			1000		By balance c/d		900
	To balance b/d		900				1000

Purchase Account LF no.

Dr Cr.

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
4	To cash A/c		1500				
5	To Birendra's A/c		2000 3500				

Dr Chetan's A/c Cr.

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
7	To sales A/c		3500 3500	8	By cash A/c By Discount A/c		3430 70 3500

Dr Birendra's Account Cr

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
9	To Discount A/c To cash A/c		50 1950 2000		By purchase A/c		2000 2000

Dr Discount Account Cr.

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
8	To Chetan's A/c		70 70	9	By Birendra's a/c By balance c/d		50 20 70

Dr. Salary Account Cr.

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
10	To cash a/c		500		By balancec/d		500

Amar's capital A/c

Dr Cr

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
1					By cash A/c		10,000

Bank A/C

Dr. Cr.

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
2	To cash A/c		2000				

Furniture A/c

Dr. **Cr.**

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
3	To cash A/c To balance b/d		1000 1000 900	12	By depreciation a/c By balance c/d		100 900 1000

Purchase Account LF no.

Dr Cr.

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
4 5	To cash A/c To Birendra's A/c		1500 2000 3500				

Dr Depreciation a/c Cr

Date	Particulars	JF	Amount (Rs.)	Date	Particulars	JF	Amount (Rs.)
12	To furniture a/c		100		By balance c/d		100

Trial balance-

Definition: According to double entry system after recording all the transactions into journal and posting them into ledger and ascertaining their balances, the statement prepared to ascertain the arithmetical accuracy of accounts on a certain date is called Trial Balance. It is the statement on the basis of which trading, profit & loss account and balance sheet is prepared.

Features: i) Recording of all transactions according to double entry system

ii) Finding out the differences of debit and credit sides of all ledger accounts.

iii) prepared on a particular date. Iv) Total of debit and credit columns are equal, we assume the ledger accounts are arithmetically accurate.

v) Difference point out some mistake. vi) Tallying of trial balance is not a conclusive proof of accuracy of accounts.

Objectives: i) Ascertain the arithmetical accuracy of ledger accounts. Ii) Completion of double entry iii) Ledger account balance iv) helps in preparation of final accounts:

Preparation: One of the following two methods are adopted.

i) Total method ii) Balances method

Most cases balances method is adopted.

Cash book-

Necessity

- The system of recording each transaction with narration in the journal and then posting each entry in to different accounts in the ledger was more time consuming and resulted in higher establishment cost.
- In every business most of the transactions relate to receipt and payments of cash and bank transactions.
- Therefore it is convenient to maintain a separate book ' Cash book' to record such transactions by taking the cash and bank accounts out of the ledger.
- Cash book may be described as a primary book meant for recording all cash and bank transactions date wise accompanied by brief narration.
- For other transactions, similar transactions are grouped and maintained in subsidiary book on the basis of which ledger is written by posting the totals and not the individual transactions.

Features of cash book.

- Only cash/bank transactions are recorded

- It performs the role of both journal and ledger.
- Receipts are recorded on the left (Dr.) side and payments on the right side (Cr.)
- It records only one aspect of the transaction i.e cash and bank.
- Transactions are recorded in chronological order.
- Cash column must have debit balance (if any), bank column may have debit or credit balance.
- Ledger posting is not required
- Unlike ledger cash book is daily balanced.
- Debit balance of cash column is the cash balance of the business.

Cash Book	Specific transactions to be recorded	Ruling
i) Single column ii) Double column iii) Triple column iv) Petty cash book	Cash transactions Cash and discount transactions. Cash, bank and discount transactions Petty cash transactions.	i) That of ledger a/c ii) Two columns Cash & Discount replacing amount column iii) Three columns, discount ,Cash & Bank in place of amount.

Petty cash book

- **Simple petty cash book** : The petty cashier receives some money from the cashier and goes on spending. The amount received is recorded in the debit side and petty expenses are recorded on the Cr. Side chronologically with supporting voucher no. The amount given by the cashier is recorded in main cash book.
- **Imprest system of petty cash book**: The petty cashier is given a definite amount (called **Float**) at the beginning of the month or week. The limit of Float is fixed depending on past experience which may be sufficient to meet the petty expenses during the period. At the end of the period the petty cashier submits the account of the spent amount to the cashier and get the spent amount reimbursed so that the total amount of balance again becomes equal to the float amount.
- **Analytical petty cash book:** It is almost same type as other petty cash books except that the on the credit side different columns for different heads of petty expenses are given. This gives the automatic arithmetic check of accuracy.

Note: Cash book records are supported by credit or debit vouchers. For all cash transactions receipts /vouchers are prepared. All vouchers are numbered and respective voucher no is entered in appropriate column.

Subsidiary Books

Subsidiary books	Specific transactions to be recorded.
Goods Book i) Purchase book ii) Sales book iii) Return inward book Iv Return out-ward book **Bills Books** i) Bills receivable ii) Bills Payable **Books proper**	Credit purchase of goods Credit sale of goods Goods sold on credit are returned by customer Goods purchased on credit are returned to supplier. Bills receivable drawn Bills payable accepted. Transactions not covered elsewhere.

Discount & Bank columns

Rule for discount: *when ever cash is debited discount also is debited and vice versa.*
Discount allowed earlier but disallowed later: *Allow discount is a loss. So is shown in debit column of discount in cash book. If disallowed latter it is not to be reflected in cash book but should be passed through journal.*
Discount Received earlier disallowed later: *When discount is received earlier but later on disallowed it is necessary to cancel the equal amount by means of journal entry.*
Contra entries: In three column cash book there will be some cross or contra entries i.e deposit of money from cash to bank a/c or with drawal. In all such cases both entries find place in the cash book and no ledger entry is required. This is indicated by a contra sign © in folio column.
Treatment of cheques: (i) Received and deposited on the same day: Bank column gets debit by crediting to debtor's A/c.
(ii) Received but deposited on later date: Enter the same in cash column in credit side '**By bank A/c**' on the day of receipt. Then make contra entry in debit side of bank column 'To cash a/c' on the date of deposit.
No information about deposit: Assume deposit on same day.
Cheques received but endorsed in favour of creditor. On receipt enter in debit side of cash column and when endorsed credit cash column 'by creditor's a/c'

Components of final account:

At the end of the accounting year it is essential to close all books of accounts to know the profit or loss for the year. To achieve this objectives, the businessman prepares certain financial statements called final accounts. The different components are:

- **Trial Balance**: The closing balances of different accounts are put together in a statement having two sides Dr. and Cr. known as Trial balance. The debit balances of different A/cs are put on debit side and the credit balances on credit side. The total of Dr. side and Cr.

Side must match or else there is arithmetic error some where. So rectification of accounts is to be carried out. This is the basis on which final account is prepared.

- **Trading /Manufacturing A/c** :After the trial balance trading a/c or manufacturing account can be prepared. All expenses relating to trading or manufacturing like raw materials consumed, wages, power and fuel, royalty, patent etc are entered in debit side and all income from sale, closing stock, etc are entered in credit side. If there is credit balance it is gross profit; if there is debit balance it is gross loss.
- **Profit and loss A/c** : The gross profit or the gross loss from the trading/manufacturing a/c is entered in appropriate column ie gross profit in credit side or gross loss in debit side. All other expenses of the concerned financial year except those already accounted in trading/manufacturing a/c are entered in debit side and similarly incomes & receipts in credit side.
  All payments/expenses due but not incurred, and all incomes and receipts due but not received during the concern year are to be taken into account where as if any income related to next year but received in current year or any expenditure related to the next year made this year are not to be considered.
  If the total of credit side is more than the Total of debit side then the difference is the net profit ; the reverse is net loss. The net profit is written on the debit side, if net loss, it is written on credit side of the profit & loss a/c. The net profit is transferred to balance sheet. The profit & loss a/c. reflects all the expenses and income that are revenue in nature. Capital expenditure and capital income do not find place in profit & loss a/c.

Trading A/c format

Trading Account of M/s....... For the year ending ....

Particulars	Amount Rs. P		Amount Rs. P
To opening stock To Purchases Less purchases return To carriage To Freight To wage To.... (All expenses) To gross profit transferred to profit & loss A/c	- - ———	By sales Less sales returned By closing stock By gross loss transferred to profit and loss a/c	———

Illustration

On the basis of following balances prepare the trading account for the year ending 31.3.2011

Subsidiary Books

Subsidiary books	Specific transactions to be recorded.
Goods Book i) Purchase book ii) Sales book iii) Return inward book Iv Return out-ward book **Bills Books** i) Bills receivable ii) Bills Payable **Books proper**	Credit purchase of goods Credit sale of goods Goods sold on credit are returned by customer Goods purchased on credit are returned to supplier. Bills receivable drawn Bills payable accepted. Transactions not covered elsewhere.

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Purchases	Rs.	Manufacturing expenses	Rs.
Wages	45,500	Sales returns	7,500
Opening stock	5,000	Power	150
Sales	25,000	Coal & coke used	800
Carriage inwards	68,800	Octroi	250
Freight & duty	1,500	Clearing charges	150
Purchase returns	3,500		
	2,500		

Trading account for the year ending 31st March 2011

Dr Cr

To opening stock	Rs	By sales 68,800	Rs.
To purchase 45,000	25,000	By sales return 150	68,650
Less return 2,500	43,000	By closing stock	35,000
To carriage inward	1,500		
To wages	5,000		1,03,650
To freight & duty	3,500		
To manufacturing expenses	7,500		
To power	800		
To coal and coke	250		
To octroi	150		
To clearing charges	350		
To gross profit c/d	16,600		
	1,03,650		

Profit & Loss account

From the following trial balance, prepare profit and loss account as on 31.03.2011. (Rupees in thousand)

	Dr	Cr		Dr	Cr
Stock on 31.3.2011	15.	-	Sundry creditors	-	12
Trading a/c balance	-	44	Drawings	18	-
Travel expenses	3	.6	Repairs & renewals	0.5	-
Travelling sales man's salary	12	-	Bonus and commissions received	-	4
Free samples	3	-	Sundry debtors	15.5	-
Discount received	-	-	Cash in hand	3	-
Ware house rent & insurance	5	2.4	Advertising & publicity	1	-
Brokerage	2	-	Capital a/c 1.4.2010		17
Freight outward	1			80	
Delivery van expenses	1				80

Profit & loss account of Mr.... As on 31.3.2011
Dr. (Rs in thousands) Cr.

To sales man salary	12	By trading a/c (Gross profit transferred)	44.6
To travel expenses	3	By discount received	2.4
To warehouse rent & ins	5	By bonus & commission	4.0
To freight outward	1		51
To Ads & publicity	1		
To free sample	3		
To brokerage	2		
To D. van expense	1		
To Repair & renewal	0.5		
To capital a/c (Net profit transferred)	22.5		
	51		

Balance sheet

A balance sheet is an accounting statement prepared from accounting balances at a given date. It shows the financial position of the business by detailing the sources of funds and the utilization of these funds. It shows the assets and liabilities grouped , properly classified and arranged in a specific manner.

Objectives:

- Nature and value of assets
- Nature and extent of liabilities

- Solvency of the business.
- Over trading and under trading. For sound financial position the business must have sufficient working capital (Current assets-current liabilities).

Classification of assets

- Real
  - Fixed
    - Tangible
    - Intangible
  - Current
    - liquid
    - Non-liquid
- Fictitious

- Fixed Assets: Durable in nature and intended to be retained permanently in business.
  i) Tangible : Land, building, vehicles, furniture, machineries etc
  ii) Intangible: patents, Good will, trade mark which are not physically existent but have value.
- Current or floating assets : Temporarily held which are meant for resale or which frequently undergo change e.g stock, store, debtors, bills receivable etc.
  i) Liquid assets are those which can readily be converted to cash without appreciable loss like cash in hand, cash in bank.
  ii) Non liquid assets are stock and store.
- Fictitious assets: Those which are not tangible like Preliminary expenses, debit balance of profit & loss a/c. These are nominal or imaginary assets.

Liabilities

- Internal
- External
  - Fixed or long term
  - Current or short term
    - Deferred
    - Liquid or quick

Internal liabilities : are proprietor's equity which comprises of capital, reserves, balance of profit and loss a/c. It is the liability of the business towards the proprietor. It is not to be paid by the firm.
External liabilities : Claim of the outsiders against the assets of the business. These include loans, creditors, overdrafts, bills payable etc.
i) **Fixed liability** : Long term loans
ii) **Current liabilities**: to be cleared usually within a year. Bills payable, trade creditors, short term bank loans etc.
Deferred liabilities: Liabilities to be paid after one month but within a year.
Quick liabilities: liabilities to be paid within one month.

Characteristics of Balance sheet

- It has no debit and credit sides. So 'To' and 'By' words are not prefixed to the name of a/c.
- It is prepared at the end of the accounting period. It shows the financial position for a particular day.

- It shows how much the business owes to others and how much others owe to the business.
- The totals of assets and liabilities sides are equal.

Why balance sheet is prepared?

- To disclose financial position on a particular day.
- Guides the business to decide the amount of provisions or reserves to be created to meet the future contingencies.
- To disclose owners equity on the date of balance sheet.

Advantages of balance sheet

- It is helpful in ascertaining the financial position of the business by showing assets and liabilities on a specific date.
- It discloses the solvency of the business
- It discloses the proprietary interest of the owner.
- It help in calculation of various ratios which help in better management of the business.
- It helps to ascertain the amount of capital employed in the business.

Illustration

Prepare a trading and profit and loss a/c and balance sheet as on 31.12.2011 from the following balances.

Capital (credit)	3600	Machinery	700	Sales	8200
Purchases	4000	Sales return	100	Opening stock	1000
Drawings	400	Wages	1000	Carriage inward	50
Salary	600	General expense	200	Rent	500
Purchase return	50	Debtors	3000	Cash	400
Carriage outward	200	Advertise	200	Creditors	500

Trading account

Dr. For the year ending 31.12.2011 Cr

Particulars		Amount	Particulars		Amount
To opening stock		1000	By sales	8200	
To purchase	4000		less return	100	
less return	50			8100	8100
	3950	3950			
To wages		1000			
To carriage inwards		50			
To gross profit		2100			
		8100			8100

Dr Profit and loss account for the year ending 31.12.2011 Cr

Particulars	Amount	Particulars	Amount
To salary	600	By gross profit	2100
To general expenses	200		
To rent	500		
To carriage outward	200		
To advertising	200		
To net profit	400		
	2100		2100

Balance sheet

Balance sheet
As on 31.12.2011

Liabilities		Amount	Assets	Amount
Creditors		500	Cash	400
Capital	3600		Debtors	3000
Add net profit	400		Machinery	700
	4000			
Less drawings	400			
	3600	3600		
		4100		4100

Cost & its elements

Cost: is the amount of resources (expressed in monetary terms) given up in exchange for some goods or services.

Components of cost : Cost has three components known as 3Ms ; Materials, Men (Labor), and Money (Expenses). Each component is again divided in to two parts i) Direct and ii) Indirect. Sum of direct parts of all three components is termed as **prime cost** and those of indirect parts as **over head**. Prime cost is the **variable cost** and the over head is the **fixed cost.**

Direct material cost: The cost of raw materials which directly enter in to the manufacturing process and become the part of the finished good. These materials can conveniently be measured and the cost is charged to the final product. Examples are: wood in furniture ,making cloth in dress making, jute in gunny bag making, wool in sweater making etc.

Indirect material cost :i) There are some materials which are used in manufacturing a product but they do not appear in finished good and they can not be measured. The cost of such materials come under indirect cost. Eg: lubricant and cotton waste used for machines, sand paper used for furniture making etc.

ii) Even though some materials form a part of finished good they are not treated as direct materials because of their very small cost and also their measurement is difficult. As for example: nail in furniture making, varnish in winding, adhesive in shoe making, thread in dress making etc. These costs are considered under indirect cost.

Direct Labor cost: Direct labor is that labor which can easily be identified, measured and charged wholly to the product, job or process. It is the wages of labor engaged directly in production line such as supervision, maintenance, tool setting, transportation materials inside the factory, payment to inspectors etc.

Indirect labor: It is that labor which cannot be easily identified in a product and cannot be conveniently measured. Payment to clerical staff, security personnel, apprentice and trainees, coolies in various deptt. Wages of service deptt. Personnel etc.

Direct Expenses: All expenses other than direct material and direct labor which are specifically spent for the particular product, job or process and can be easily measured in the product comes under direct expenses. Eg. Excise duty, royalty, architect's fee, design charge etc.

Indirect expenses: Besides the direct expenses some other expenses are there which are not directly spent on the job and are general in nature. Eg. Rent, insurance premium, interest, municipal taxes, canteen, welfare expenses, G.M's salary, postage, telephone, telegrams, power, transportation, training to new recruits, advertisement etc.

Overhead: It is the sum of cost of indirect materials, indirect labor and indirect expenses spent in the organization.

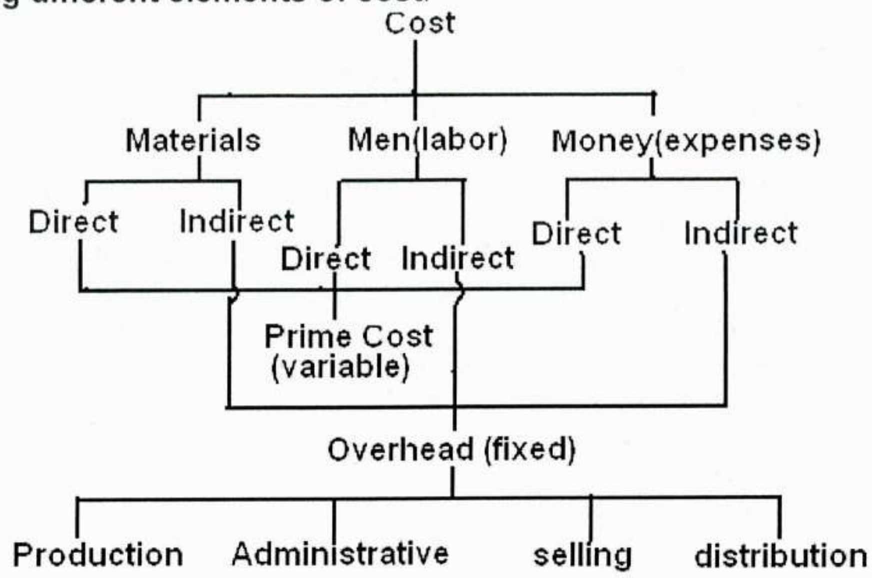
Production overhead: It is the overhead spent inside the factory. It is called factory overhead or works' overhead also. Eg. Depreciation of plant and machinery, Repair and maintenance of machinery, electricity ,fuel lubricant used for production, etc.

Administrative overhead. It is the overhead for administrative work; like direction, control, communication, clerical, computer expenses, salary of GM, office stationeries etc.

Selling overhead: over head for promoting sale: like advertise, salary of salesmen, sales office expenses, show room expenses etc.

Distribution overhead: It is overhead for creating customer base: like warehouse rent, delivery van, delivery staff payments, packing, transit loss etc.

Chart showing different elements of cost.



Cost sheet

Statement of cost (Example)

Units produced =4000 , Profit 20% on total cost.

Expenditure head	Total cost(Rs)	Unit cost (Rs)
Raw materials	65,000	16.25
Direct expenses	15,000	3.75
Manufacturing wages	16,000	4.00
Carriage inwards	2,000	0.50
Prime cost	98,000	24.50
Works overhead Depreciation of P&M 7,000		
Factory lighting 2,000		
Factory rent 3,000		
Factory insurance 1,000		
Add works overhead	13,000	3.25
Works cost	1,11,000	27.75

Office overhead BF	**1,11,000**	**27.75**
Depreciation of office bldg. 3,000 Salary 18,000 Energy bill 1,000 Rent 6,000 Telephone, postage, fax, insurance, etc 2,000 Total:	30,000	7.50
Cost of production	1,41,000	35.25
Selling & distribution overhead Expenses on delivery van3,000 Ads 16,000 Del. Staff salary 5,000 Depreciation of van 2,000 Show room expenses 6,000 Adding	32,000	8.00
Total cost	1,73,000	43.25
Add profit (20%)	34,600	8.65
Selling price	2,07,600	51.90

Cost-volume-profit relationship & Break- even point (BEP)

Necessity : For an entrepreneur three things are important for successfully running the business. (i) Cost of unit product (ii) quantity or volume of product (iii) Profit . All the above three elements are interrelated variables and dependant on various factors. Analysis of this relation will help the organization to maintain a healthy life and ensure success.

Factors affecting cost : Change in cost of raw material, labor and other input costs, taxes and duties etc affect the cost of manufacturing.

Factors affecting production: Shortage of raw materials, change of demand, change of fashion, introduction of new products etc affect the volume of production.

Factors affecting Profit : change in volume of sale, demand and supply status , production cost etc. affect the profit margin

Break-even analysis:

At any time during the accounting period it is essential to know if the business is running at a profit. Break-even analysis helps to know this and also helps to forecast the profits at various levels of production.

Terms used in BEP analysis

Fixed cost: The sum total of all the overhead expenses constitute the *fixed cost*. It is independent of level of production and remain fixed whether there is production or no production. But fixed cost per unit production change depending on volume of production.

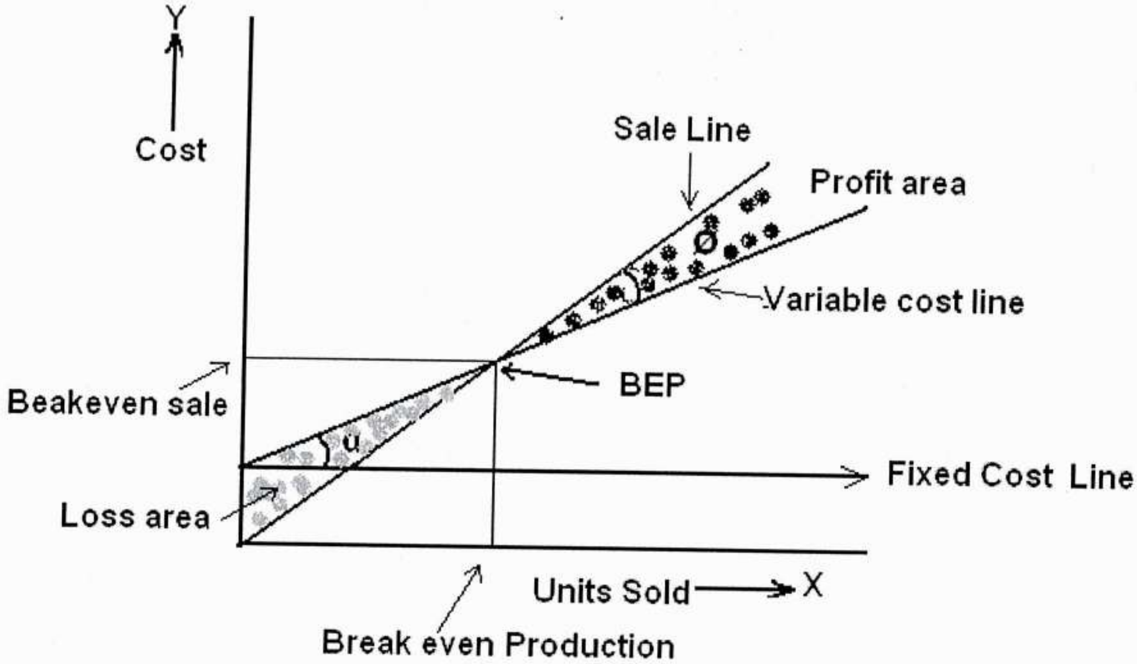
Variable cost: The prime cost is the same as *variable cost* It varies in direct proportion to production volume. Raw materials, labor, royalty, excise etc.

Total cost : For a particular level of production, the sum of fixed cost and the variable cost is the *total cost.*

Marginal cost or Incremental cost per unit: It is the cost of production of an additional unit.

Break even point (BEP): It is the point where total cost equals to total income.
Break even production: Production level at which there is no profit or no loss is Break even production
Break even sale: Sale level at which there is no profit or no loss is Break even sale.
Contribution: It is the sum of fixed cost and profit. Alternatively it is the total sales value less variable cost.
P/V Ratio: It is the ratio between contribution and the sales.
Margin of safety: Actual sale less break even sale is the *margin of safety.*

Graphical representation of different parameters:



tanα – Marginal cost or Incremental cost per unit, Ø – Angle of incident
It may be noted that larger the angle of incidence more is the profit.

Numerical example: Given: *Total fixed cost : =1,80,000*
Selling price per unit: =40
Contribution per unit =25 , Find out a) P/V ratio, b) BEP c)Sales value to earn a profit of 1,20,000. Solution: a) P/V ratio = Contribution/ sales = 25/40 = ***<u>5/8</u>***.

b) let x be the sale volume at BEP and c be the BEP cost.
marginal cost /unit =sale price per unit – contribution per unit = 15 , At BEP; sale = Fixed cost + Variable cast => 40x = 1,80,00+15x => x=7200 units.
So BEP sale = 40 x 7200 = ***<u>Rs. 2,88,000</u>***

c) Let the sale volume for earning profit of 1,20,000 be s.
Sale price = 40s, Total cost = 1,80,000 + 15s
Sale price = Tot al cost + Profit .
=> 40s = 1,80,00 + 15s +1,20,000 => s = 12,000 units,
So, sale value = 40s = ***<u>4,80,000.</u>***

Procedure involved in purchaging:

- **Receipt of purchase requisition**: The store keeper is in charge of the all the materials in store needed for the organization. At all times he is aware of the movement of materials and the stock position. When he knows about the need of any material whose stock has depleted bellow the critical stock level, he prepares the purchase requisition in prescribed proforma and sends it to purchase deptt. for procurement after retaining a copy in his file..
- **Exploring the sources of supply & selection of supplier**: Some big organizations have their own vender enlisting facilities for supply of materials or sub-assemblies needed by them. They have the pre-determined qualification criteria. Those who qualify are only enlisted. The venders are to renew their enlistment at regular intervals specified by the organization. The other way of exploring the sources of supply is through widely published tender call notices or quotation call notices. Mostly Govt. organizations follow this procedure.
- **Placement of P.O** : After selection of supplier the purchase deptt. prepares the order in prescribed formorma where all the details of the material and terms and conditions are stated. The purchase officer places the order in triplicate on the selected supplier keeping one copy of the order in his file and endorsing a copy to the storekeeper.
- Contd...
- **Follow-up letters/ correspondences**: After placement of order, the purchase officer must ensure that the order has been received by the supplier in time and he has returned one copy of the order duly acknowledging the acceptance of the order. For this some post-placement –of- order correspondences may be required with the party.
- **Testing & inspection**: Before dispatch of the materials, and as & when the materials are ready in his works, the supplier issues inspection call to the purchaser. On receipt of the inspection and testing call the organization may carryout the testing & inspection in the works of the supplier by departmental officers or through third party agency or can issue waiver.
- **Dispatch instructions** : Once the factory test reports are accepted by the purchaser, dispatch instructions are issued to the supplier. The dispatch instructions tells the supplier where and whom to deliver the materials.
- **Receipt and verification**: Once the materials arrive at the destination, the designated receiving officer, usually the store keeper, verifies the materials both quantity and quality as per the purchase order, transit damage, if any, dispatch documents as per P.O and prepares the Goods Received Note (GRN) in required copies and sends it to concerned branches including store. ,
- **Passing the bill for payment**: After the supply is over, the supplier prepares the bill in triplicate and submits it to the purchase officer who verifies the bill comparing with the order, GRN, inspection report and challan. IF every thing is in order he certifies the bill for payment send two copies to the Accounts section where it is checked for arithmetical accuracy and compared with the purchase order and the GRN. After being satisfied the bill is passed for payment and one copy is sent to the cashier for issue of cheque.

  Centralized Purchase: When all the requirements of an organization is purchased by one department or individual, it is known as centralized purchase. This is convenient to

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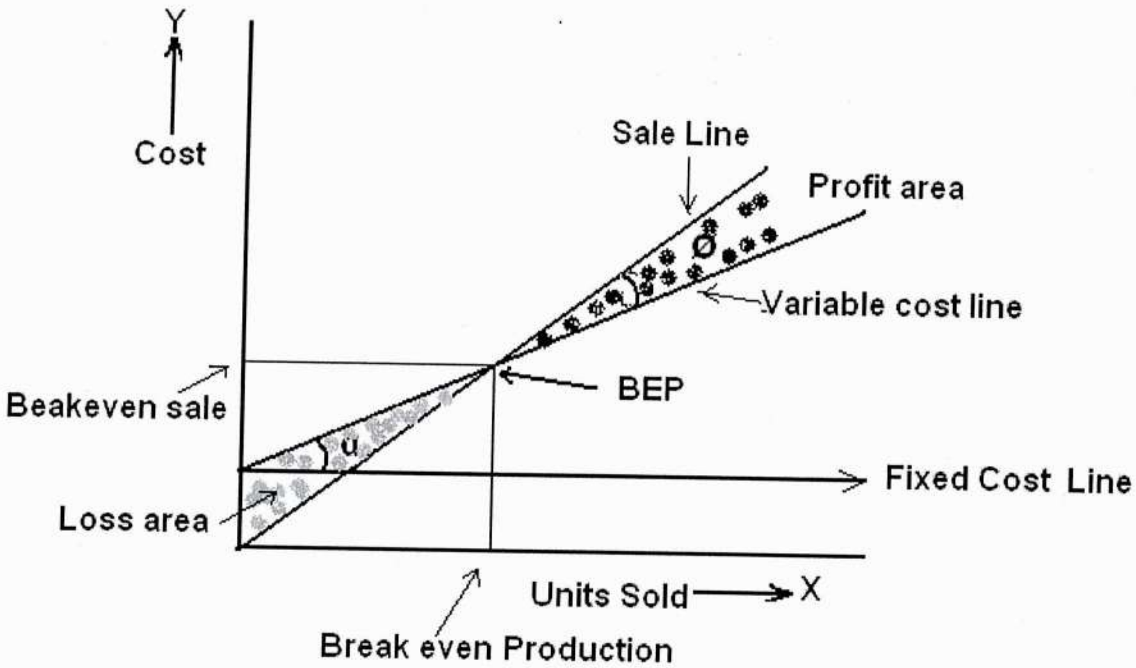

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the organization which has all the departments under one roof. Here a separate purchase department carry out all the purchase activities.

Decentralized purchase. Where the departments or sections purchase their own requirements separately, it is known as decentralized purchase. This is mostly adopted for the organization whose departments are situated at different places.

Advantages of centralized purchase:

- In centralized purchase, goods are purchased in large quantities . So price preference and easy terms and conditions can be obtained from the suppliers. This ultimately reduces the cost of production hence more profit.
- Uniform purchase policy can be adopted for all the departments. Standardized purchase documents can be adopted in respect of general terms and conditions, discount, payment terms etc. This saves man-hour to a great extent.
- In this case one purchase expert can be appointed for the purpose to carry out the purchasing job efficiently.
- In centralized purchase excess materials lying in department can be transferred to other departments where ever it is needed.
- Better financial control is possible in centralized purchase. The purchase budget for the entire organization can be prepared at one place well in advance and funds can be allotted.
- It avoids duplication of purchase by different department of the organization.
- It eliminates unnecessary purchases.
- continued..

Disadvantage of centralized purchase.

- The lengthy procedure in centralized purchase delays in getting materials by the departments.
- The are chances of miss-communication between the purchase department and other department.
- It is not suitable for small purchase as the procedure is very lengthy.
- There are a lot of control on all purchase even for a small purchase.
- It is not suitable for perishable items.
- Due to large quantity purchase, there may be loss of materials during handing, improper storage, theft etc.

Advantages of decentralized purchase.

- It allows autonomy to different departments. They have the independence over purchase of materials of their department.
- It avoids lengthy and complicated purchase procedure involved in cetralized system.
- This system is quick and prompt and delay in procurement is easily avoided.

- Under this system better quality materials can be purchased which suits best for the purpose.
- It is beneficial for purchase of perishable or short self life materials.

Disadvantage of decentralized purchase.

- In this system the purchase quantity is small for which the cost of purchase is more resulting in increased cost of production and loss to the organization.
- Better terms and conditions can not be obtained from the vendors. Price will be high, discount will be less and credit period will be less.
- Same item may be purchased by different departments from different firms at different prices with different terms and conditions.
- Under this system materials in small quantities may remain idle in almost all departments which may add up to blockage of appreciable fund. Misuse of excess materials may occur.
- Under this system qualitative purchase may not be possble as different departments purchase from different sellers
- Uniform purchase policy on terms and conditions, discount, payment etc is
- Contd..
  not possible in decentralized purchase system.
- Unnecessary purchase of certain items by some departments can not be avoided even that item is lying idle in some other department.
- If all departments purchase on their own financial indiscipline in the organization occurs and it becomes difficult to prepare purchase budget.

Inventory Control

Inventory refers to the stock of materials, spares, assemblies, sub-assemblies, tools and plants etc which are meant for normal consumption or use in smooth functioning of the organization. Inadequate inventory affects the functioning of the organization where as excess inventory blocks the money which otherwise could have been utilized for profit earning. So there is need for exercising control over the purchase, storing and usage of inventory in an organization.

Importance of Inventory control:

- It helps to maintain uninterrupted flow of production activities by timely supply of various materials to different sections thereby increasing the production and reducing the cost.
- It increases operational efficiency and consequently production target is achieved in time.
- It helps timely supply of product to customers to maintain their good will and relation
- It helps to avoid piling of stocks of finished goods.
- It helps to avoid storage and scarcity of inventories.
- It helps to maintain perfect level investment in inventories by checking over investment or under investment.

- It helps to achieve effective utilization of all the inventories by reducing their idleness (blockage of money) for a long time.
- It helps to reduce the working capital requirement of the organization.
- It helps to regulate the cost of maintaining inventories by proper management of the inventory.
- It checks the loss during receipt, storage, usage, mishandling, theft, obsolescence etc.
- It helps to control movement of inventories both inside and out side the organization.
- It helps to decide most economical lot for purchase.
- It helps to achieve economy in production and sales.

Different store records

Bin card.:

- In the store each material is assigned a particular space called bin for easy identification and handling of materials.
- Each bin or space is numbered in a logical manner. Besides the bin also has the code number of the material which the bin contains.
- A bin card is attached to each bin.
- The bin card is a printed form to record receipt and issue of materials chronologically and the balance so that at any instant the stock position of the material is known.
- The specimen of a bin card is shown

Bin Card No.....

Bin No .... — **Max. stock level.....**
Name of material.... — **Ordering level.....**
Code No of material.... — **Minimum level....**
Store ledger folio.... — **Critical level......**

Date	**Receipt**		**Issue**		**Balance In Qnty.**	**Remark**	**Goods on order**		
	GRN No.	Qnty	MIR No.	Qnty.			P.O No. & date	Qnty	Expected delivery date

Store Ledger:

- Store ledger is a big volume of bound book of forms whose pages are serially numbered.
- It is maintained by the store keeper to record the account of all store items.
- There may be more than one volumes of store ledger depending on the number of store items or number of classes of stock items.

- Some pages are allotted to each item depending it's frequency of transaction.
- Store ledger forms are identical to Bin card forms except that the money value of items are shown in store ledger.
- It also records the receipt, issue and balance of materials with price.
- It also records other particulars like in bin card.
- Specimen of store ledger form is shown in separate slide.

Page No......

Bin No. .... **Max. stock level. ....**
Bin Card No. ...... **Ordering level ....**
Name of material....... **Min. level ....**
Code No. .... **Critical level ....**

Date	**Receipt**				**Issue**				**Balance**			**Remark**	**Dt. Of check**	**Goods on order**		
	GRN	Qnty	Rate	Amount	MIR	Qnty	Rate	Amount	Qnty	Rate	Amount			PO no dt.	Qnty	Expect dt.

GRN (Goods Received Note) :

- GRN is a proforma which contains the details of materials received such as quantity, specification, price, date of receipt, P.O. No., supplier's name etc.
- It is prepared by the designated receiving officer for a particular consignment as per P.O. after due verification and acceptance.
- In most cases the storekeeper is the receiving officer. So he prepares the GRN.
- The GRN is prepared in triplicate; one copy to purchase deptt., one to Accounts branch and the last copy is retained by the store.
- A specimen of GRN is shown in separate slide.

•No .... **Date.......**

Name of material.......

Code No.................. **Date.........**
Name & address of supplier ....
P.O. No. & Date.....................
Supplier's Challan No...........
Date & Time of receipt........
Inspection report No............

Sl No.	Item details	Qnty. ordered	Qnty. supplied	Qnty rejected	Qnty accepted	Unit rate	Amount	Remark

Signature of store keeper...... **Signature of receiving officer ....**
Other important records.

- Records of return of materials/products. Different cases may arise.
  i) Over issued surplus materials or un-used materials from site of work are returned to store duly recorded in a suitable form (Material Returned Note) MRN for taking back to store account.
  ii) Products sold to customers may not be accepted and returned which are entered in Sales return note and recorded in store account
  iii) Some times materials supplied by suppliers against a P.O may not be accepted and returned back. They are entered in supply return note and returned to the supplier after keeping a note in store account .
- Materials Transfer Note (MTN). The surplus materials of one department may be transferred to another department for utilization instead of returning the same to the store by endorsing a copy of MRN to store for record.
  The store maintains Guard files for all kinds of correspondences duly classified such as P.Os, indents, Inspection & test reports, etc.

Financial management in SSI

Meaning : It is the branch of management which looks after the finance functions of the organization and is the custodian of funds of the organization.

Importance:

- Finance is needed to convert ideas into projects.
- Finance is the most important component of the business
- Finance is not only needed to start the business but also it is needed to run it.
- Finance management is a continuous process.
- The main cause of failure of an enterprise is the mismanagement of finance.
- Proper finance management brings financial discipline to the organization and maintain its financial soundness.

- Proper financial management maintains the liquidity position of the business at perfect level
- Proper finance management ensures proper use of funds and avoids misuse.
- Unlike in big organization, the finance function is managed by the entrepreneur himself like the finance manager in a large organization.
- The entrepreneur has to train himself for the purpose.
- Unlike a large company, SSI can not sell shares, debentures and invite fixed deposits to collect funds for the enterprise.
- SSI entrepreneur has to arrange his own money to meet the equity portion of the capital investment. So he should be financially sound and must be able to arrange borrowings from friends and relatives.
- For the balance capital requirement he depends on Banks and Financial institutions
- He should have good knowledge about Govt. policy on setting up SSI and the institutional supports available for the purpose, so that he can avail loan at subsidized interest rate, favorable repayment schemes, tax holidays etc.
- He has to carefully make the financial estimates and financial analysis and plan to run the unit so that his rate of return on capital investment remains within the acceptable limit.
- He should have the ability to arrange credit supply of raw materials

Types of capital

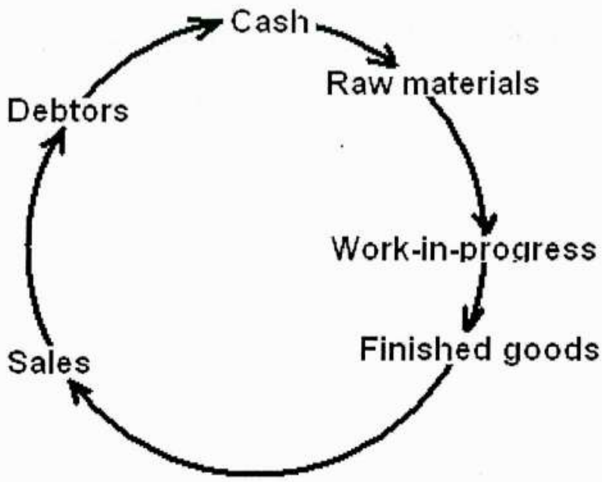
Fixed Capital:

- It is the amount of money invested in fixed assets like land, buildings , plant & machineries, T & P, furniture ,fixtures etc to create physical infrastructures to carry out business.
- Even though it facilitate to generate revenue it is a long term blocked capital as it can not be converted into cash at the time of need.
- Fixed capital is converted to permanent assets.
- Both over capitalization and under-capitalization are harmful to business.
- The appropriate level of fixed capital has to be correctly estimated beforehand keeping in mind the reasonable ROR on investment in fixed capital.
- Institutions like ICICI, IFCI, SIDBI, NSIC, NABARD, RRB, SFC, SIDC etc provide long term loans in financing fixed capital.

Working capital:

- The amount of money invested by the business in the current assets and to meet the day today expenses is known as working capital
- Working capital requirement depends on type and size of business.
- Since the production is a continuous process, the need for working capital is felt continuously.

- Requirement of working capital varies seasonally depending upon market condition for the product.
- Cash is the most important element in the working capital.
- When working capital is put into the business in form of cash it goes through different processes to become cash again. This process continues in a cycle know as '**operating cycle'.**



OPERATING CYCLE

- The duration of operating cycle depends on several factors and is to be decided to plan out its arrangement.

Components of working capital:

1) **Fixed working capital**: Since manufacturing is a continuous process the requirement of working capital is continuously needed. The requirement of working capital varies from season to season depending on market condition for the product. So depending on the demand for the product the requirement of working capital varies within a minimum and maximum limit during the year. The portion of minimum level of requirement of working capital is termed as fixed working capital.

2 Fluctuating or Temporary working capital.
The requirement of working capital over and above the minimum requirement is known as fluctuating or temporary working capital. The requirement is seasonal . Commercial Banks provide short term loan for this . Even one can use Bank over draft to manage it.

Working capital management: The different components of working capital to be properly managed are: a) cash, b) Inventories, c) debtors and creditors, d) bank balances, e) income & expenses, f) sales, disdtibution & marketing g) purchases etc.

Management of working capital: It involves the following steps:

- Forecasting the requirement of working capital
- Estimating the amount required
- Planning to procure the working capital
- Deciding the sources
- Deciding the time when required

- Deciding the requirement duration
- Planning the every element of working capital budget wise and ensure its proper use.
- Checking the misutilization and misappropriation.

Production management

Importance of Production, planning &control

- Helps to increase productivity by ensuring speedy, economical, and efficient use of available resources. It reduces the idleness of men, machine and materials and minimizes the cost of production.
- Helps to arrange the production process sequences in such a way that the production target is achieved.
- The tool is very important in case of continuous industries where units produce are identical in nature.
- Helps to control the cost by optimizing the utilization of men, material and machines.
- Helps in regulating the production and maintaining quality by controlling production activities and orderly flow of materials from stage to stage and ensuring timely supply of tools and equipments.

Steps in Production planning & control:

a) **Planning**: This is the first step in production planning & control. A broad plan for the production activity is prepared. Decision on products to be produced, ingredients of raw materials, size, color, design, shape, quality, quantity specification, cost of production etc and resources required for the production are taken.

b) **Routing** : It determines the exact route through which the raw materials will flow from one process to another until those are converted to final product. Alternative routes are studied and the best one which is most economical, efficient and less time consuming is selected. It also decides the men, machine and process for each stage of production process.

c). A time table for each activity of production is prepared and time and date for starting and completion of each operation and entire operation are fixed. It provides a time table for manufacturing and all other activities starting from procurement of raw materials to delivery of finished goods to the customers.

d) **Loading** : It is associated with quantity of works assigned to each machine or worker to be done by that machine or individual. Loading of works to different machines, processes, sections, departments and individual is essential for proper distribution of duties as per the capability of the department, machine or individual. There should neither be over load or under load of works to any one.

f) **Dispatching**: It involves actual initiation of work to carry on the production and ensure that the target in scheduling is achieved well in time. Dispatching involves actual execution of plan in the manner prescribed and route decided. It includes issue of orders and instructions to carry out the work. Dispatching functions are i) issue of required materials to individuals, jobs, processes, departments ii)Allocation of required labor force and machine. Iii) Timely issue tools, equipment and accessories, iv) Issue of necessary orders, instructions and guidance v) maintenance records of instructions, orders.

g) **Follow up**: It involves to keep an watch on the progress of work as per the plan and schedule. It includes i) to see that the raw materials, equipments etc reach the shop in time as per schedule, ii) Check the progress and ensure that it is as per plan, route and schedule iii) See that there is no bottlenecks or obstacles in the performance of production activities iv) Regulate the timely and orderly flow of materials from process to process for proper utilization of capacities v) Maintain proper records of all works carried out at different stages of production.

h) **Inspection:** It is the last stage of production planning and control process. It involves checking the quality of final product & ensure that it conforms to standard. If chances of deviation are very high inspectors are appointed at various points to ensure quality.

Sales & Marketing

Importance of sales management:

- It is responsible for increase in sales volume and consequently increases the profit.
- It is responsible for equitable distribution of goods and services to all regions of the country and to all customers.
- It help to maintain an uninterrupted flow of goods and services through an effective channel of distribution.
- It is helpful to marketing management to achieve its objective by timely supply of goods and services to the customers.
- It helps to reduce cost of selling , there by increase profit.
- it is responsible for delivery of goods and services to the customers at their nearest point.
- It is responsible for realization of cash due to credit sales and reduce the amount of bad debts and unnecessary blockage of funds in the hands of customers.
- It is responsible for creation of an efficient and effective sales force to achieve the objectives of the organization.
- Sales management helps to avoid unnecessary piling of stock of finished goods at various centers thereby avoiding blockage of working capital.
- Sales management is the source of information about the various market conditions, customers, competitors, substitutes, alternatives, change in custom, habit, fashion etc. which is helpful for decision making.
- Sales management is responsible for retaining old customers by providing after sales service and thus creates new customers and new demand.
- Sales management helps the enterprise to remain and succeed in business.

Importance of marketing management:

- It helps to create demand and needs in the minds of the people for the product of the organization.
- It helps to identify markets and prospective markets. It also helps to create market for goods and services of the organization.

- It helps to create customers and to maintain cordial relation between the producer and the customer, goods and its users, customer and the middlemen, producer and the middlemen, company and society etc.
- It helps to create increased interest of the people in goods and services of the organization for which people buy more, use more. Increase in consumption habit creates demand.
- It focuses on increased customer satisfaction so that customers create customers in large numbers. It always tries to win the confidence of the consumers to retain them and attract new consumers.
- It helps to study the markets and market conditions to keep changing the marketing policy to stay in the business. It helps to maintain a perfect market information system for decision making by marketing management.
- It helps the management to gather courage to face competition. It is helpful to decide the policy & plan to beat the competitor in the market.
- It helps for production program to match the market demand and design them to suit the market.
- It helps in forecasting the demand which is essential to decide the marketing mix, marketing strategies and marketing plans.
- It is useful to win the confidence of the users by ensuring them prompt after sales service which creates long lasting relation of product and users.
- It helps to reduce the risk of business by ensuring good rate of return on investment, sound and secured future, enhanced goodwill, and sound health of the organization.
- It focuses on reduction of marketing cost which results in more profit.
- It helps sales management to achieve the target.
- It helps the organization to achieve its goal and maximize profit.
- Marketing management lays the foundation for survival and growth of the organization in the market for long run.

Product policy: Product is the most important component of the marketing management. The product policy and strategy indicate the future guidelines which are the keys for the success of a product to win the customers.

Types of products: Product can be divided into numerous categories like agricultural, industrial, consumer, producer, durable non-durable, perishable, non-perishable, luxury goods etc. But from marketing point of view good and products can be broadly divided into 3 grouped.

1) **Convenience goods**: They are products demanded by customers very frequently and in small quantities. Many substitutes of them are available. They must be made available nearest to the customer. Such products are regularly required by a large number of consumers who prefer to buy such products with least buying effort . So the product must be distributed widely through large number of retailers. Example: match box, paste, soaps, salt ...

2) **Shopping goods**: These are the goods or products which need search efforts or special visit to certain market. They are purchased less frequently depending on need and convenience of the buyer. There may be special places or area where such products are available. Buyer usually go to that area and move from shop to shop to to compare the price, size, quality specification etc. buying efforts are required for such products. Example: Furniture, home appliances, ornaments etc.

3) **Speciality goods**: They have unique feature and require special shopping efforts. They are sold in special shops meant for that purpose only. The buyer has to go to the particular shop if he wishes to buy. The buyer has the full knowledge about the product before buying. Such products are identified with their brand. Example: Cars, scooters, refrigerators, TV, washing machines etc.

Branding: Banding is the naming of a product through which it is identified among similar products. Brand name is a symbol or a design or combination of both which is intended to identify the goods or services of one seller from other competitors. Brand is applied to almost all products to have some identification mark such as trade mark, trade name, trade symbol, pictures, design etc. It also includes distinctive lettering, coloring with or without slogan. Brand is registered with the 'Registrar of Trade Marks'.

Advantages of branding:

- It builds up a bright image of the name of the particular product.
- Branded products are easily identified and can easily be recognized by the customers.
- Branding ensures a good control by the producer over the market.
- It is highly essential for success of a product in the market.
- It ensures easy selling of a product.

Principles of branding:

- Brand name should indicate something about the product, its uses, its benefit, quality, function, purpose & performance.
- Brand name should be as short as possible, easy to remember, spell and pronounce specially in case of commonly used products. In case of costly products meant for reach & educated people, a complicated, lengthy brand name may be advantageous.
- It should be distinctive and should not be similar to any other brand causing confusion.
- The brand name should have a suitable life time and should not be changed frequently.
- The brand name should be capable of being registered with the Registrar of Trade Marks for legal protection of the brand.
- The brand name should be such that it should create a pleasant association with the customers. The customer should feel dignified to buy such a product. It should have a pleasant pronunciation.
- The brand should be unique and distinctive.
- The brand should be easy for advertisement purpose.
- The brand name should preferably be easy to apply to a new product which may be introduced to the market in near future.

- The brand name should be attractive in comparison to other competitive products.

Packaging: Packaging performs three basic purposes:

- **Protection of goods** : This is the main purpose of packaging to protect the goods against loss, damage in quality and quantity, prevent leakages, preserve freshness and quality etc. So while designing the package this aspect is kept in mind.
- **Enhancement of product value**: Packaging is a marketing necessity. Consumers not only want the product, but also they want a pleasant and attractive and eye catching get up of the product which can be met by packaging. Reusable packaging has recently gained considerable importance in marketing policy. People may not hesitate to pay a little more for this. But for low cost or use and through products, non-usable and flexible packaging is used
- **Advertisement:** Packaging is also used by the producer to print the brand name, message, trade mark, symbol, price, composition symbols for handling etc.
- **Package design**: Packaging policy should take into account the design, size and cost of the package. A well design package will attract the consumers' attention and create interest in them which gives birth to the desire of the product for a consumer. The convenience of the consumer should be taken into account and should be given prime importance.
- **Labeling**: It is an integral part of packaging. There is a need to provide a number of information about the product like price, weight, use, constituents etc on the packing for the information of the consumer. If the packaging is very large, then the labeling is pasted over it in a sheet of paper. A label is a good media for advertising the brand of the product.

Pricing: Price is the amount at which the seller is prepared to sell the product to the consumer. Fixing price of a product is a complex problem for the producer. It is the main component in the product policy of an organization and is the major factor in marketing management. Success or failure of the product in the market largely depends on its pricing strategy.

Objective of pricing: The major objectives are:

- Higher ROR on investment.
- Maximization of profit.
- Stabilization of price.
- Acquiring higher market share.
- Facing the competition.
- Protecting the long run interest of the firm.
- Protection of consumers' interest.
- Maintaining product image for introduction of new products in future.

Pricing methods: There are different methods of pricing depending on cost, market , competition etc . But the most important methods are i) Cost plus, ii) Variable cost and iii) marginal cost method.

i) **Cost plus pricing**: It is adopted by majority of business houses. Under this policy the selling price of a product is based on the total cost of production including marketing and selling and then adding the desired profit margin. The profit margin depends on nature of product. This method is justified on the ground of fairness to both seller and the buyer. This method is suitable where the market condition is uncertain.

ii) **Variable pricing method**: Under this method the producer charges different prices of same product to different buyers depending on purchase volume, time of purchase, place of purchase, and other related factors. It is usually adopted by small producers for more profit and more sale. This method is also adopted if products are of uneven in size, nature, quality and specification.

Pricing strategy:

- **Skimming price strategy**: Initially very high introductory price is fixed to attract and win the effluent and upper class buyers and to place the product among the list of premium brands. Later on the producer lowers the price gradually to win the middle class and lower class buyers. At higher initial price higher sales revenue gives higher profit. When the price is lowered the consumer base increases which gives high sale volume hence high profit. This price strategy is adopted for special goods and fashionable products like perfume, toiletries etc.

- **Penetration strategy**: It is opposite to skimming strategy. In this strategy the product is introduced in the market comparatively at lower price to capture the buyers, gain greater market share, hence increased sale volume immediately. The producer lives on low profit for a long period till his brand is stabilized and long run demand is ensured. Then the producer increases the price of his product depending on market condition.

- **Mark up & Margin strategy**: Mark up is the additional charges added to the cost of product to arrive at selling price to the consumers. Mark up covers good margin to the producer, dealers and his expenses, risk of not selling, risk of damages and allied expenses relating to trading. Mark up is high in case of seasonal products and low in products of regular use. Now a days the maximum selling price is printed on the product it self This includes all costs, margin, taxes and duties, rate of return on investment etc. The printed price on the product has psychological effect in the minds of the buyer. E.g . Bata's pricing of shoes (399.95 instead of 400). The margin of commission and profit to middlemen are to be decided by the producer. At the lunch of the product in the market, higher margin may be kept for middlemen and latter when the product stabilizes in the market the margin may be reduced.

Different selling methods: There are many selling methods as discussed bellow:

- **Hire purchase or Installment**: Under this scheme first initial payment known as 'Down payment' is given and taken the possession of the good. The balance cost is paid in suitable installments but the ownership of the good lies with the supplier till the last installment is paid. Costly items like cars, bikes, refrigerators, washing machines, televisions etc are sold under this type of selling.

- **Self serving**: In consumer marts or Big Bazars the buyer move form rack to rack with a wheeled trolley and chooses his buying. Then he pays at the counter gets it packed at the counter and leaves.
- **Door to door sale**: Here the seller sends the travelling sales man to the customers and the prospective customer who go to door to door, convince and negotiate terms and conditions and even collect money. Here the customer does not go to the shop but get his needs at his door step.
- **Quoting against tender/Quotation Call Notices** : Govt, big business houses, Public sectors etc. go for purchases of large value through tendering or quotation call Notices published in news papers or e-tendering web sites. If the seller qualifies to participate in the tendering he can quote for the supply.
- **Mail order**: When the customers are spread over the country and the product is moderately priced selling can be effected by VPP (Value payble by post) through postal department or courier services.
- **Retailing**: Under this scheme the produce appoints a number of retailers to cater to the needs of the customers. Eg. Petrol, diesel, LPG, kerosene etc.
- **Wholesale**: The manufacturers of consumer durable goods and daily useable goods appoint a number of wholesalers who sell the product in large quantities to retailers who sells those to local consumers as per their needs. Here the consumers are unlimited. Eg. Edibles like grains, sugar, oil etc. daily useable like, paste, matchbox, paper, cloths etc.
- **Appointing Agents**: In case of capital goods like plant and machineries, air conditioners, lifts etc the producers appoint agents in various cities or towns to sell the product to the customer on behalf of him on commission basis. The agent contact the prospective buyers, convince them and books the order The order may directly be executed by the producer or through the Agent. The Agent also provides after sale service.
- **Company's own show room**: Some Companies open their showrooms in important places to sell their products directly to the buyers. The showrooms are well decorated to attract prospective buyers. Sales persons appointed by the company do the selling.
- **Tele shopping**: Business organizations telecast programs on television and demonstrate different product explaining their usefulness, advantages, prices etc. Besides they explain the procedure for ordering. Order can be booked by e-mail, phone call, SMS etc. The product is delivered at the door of the buyer and money is collected.
- **E- Commerce**: Due to increase use of personal computers e-commerce has gained popularity. On line payment facilities through credit/debit cards has made this type of selling buying easy. Railway /air ticket booking, ordering books, special instruments /gadgets etc through this process .
- **Auto vending** : In big railway stations automatic weighing machines, local ticket vending machines, public call booths have been installed with instructions displayed over it. Only when the correct value of money is inserted in to the machine the buyer can get the desired service/goods In Offices, show rooms, restaurants etc auto vending machines are installed for automatic sale of tea, coffee, soft drinks, chocolate and toffees.

- **Auction sale**: This sale process is a competition among the buyers. The seller fixes a base price for the goods or commodities to be auctioned and gives wide publication though different media for auction sale giving the date of auction and venue. The buyers want to take part in the auction bidding are asked to deposit a security amount and take part in bidding. The highest caller at the drop of the hammer wins the bid. Security deposit of the unsuccessful bidders are returned.
- **Counter sale**. Some producers open selling counters at their factory itself or at important places to sell their product directly to users. No middle man is involved in this.
- **Networking**: This is also known as multi level marketing (MLM). Here the buyers promote sale in a chain. One buyer if sells the product to three other buyers he gets monetary incentive. Again those three buyers each try to sell to other three to get incentive. Like that the chain goes on multiplying. As the chain goes on increasing the incentive goes on increasing at different slabs from bottom to top. Here the producer does not have to appoint selling agents or open show rooms nor he spends on advertisement.

Human Resource Management.
Different source of recruitment:
Internal sources:

a) **Transfer:** Immediate requirement can be met by transferring eligible employees from one post to other or from one job to other of similar nature.. No financial burden is involved.

b)**Promotion**: In this scheme positions or posts can be filled up by upgrading persons to higher status by giving promotion. Here there is a change in nature of duties, status, responsibility and accountability.

c)Own Training centers: Big organizations have their own training institutes where they train people continuously. The course or trades for training are usually designed to meet their own requirements. Mostly such organizations absorbs top ranked successful trainees in their organization.

External sources:

- **Advertisement**: Applications are invited for different posts through open advertisement. Candidates fulfilling the eligibility criteria are to go through different stages like written tests, viva-voce test etc for selection.
- **Campus recruitment**: Companies and public sector organizations hold campus interviews in professional institutes to recruit young and fresh talents. The placement cells in these institutions provide all assistance in holding the campus interviews. Initially the fresh recruits are taken on probation as trainees. After successful training they are absorbed in a post.
- **Walk-in- interviews**. For immediate requirement companies are holding walk-in interviews at different towns and cities. Advertisement for such interview are given in news papers giving details of venue and date. In this process no prior applications are required.
- **Employment fair or Job Mela**: A number of employers and consultants combined together hold employment fair in important places with prior advertisement to recruit new employees. Inside the mela all instructions are displayed prominently to guide the aspirants.

- **Employment consultants**: Many consultancy firms are available to provide man power solutions. They usually are tied up with some organizations to take up recruitment process on their behalf as and when required.
- **Employment Exchange**. Employment exchanges, which are Govt. organizations are available through out the country. They have the list of different categories of man power registered with them. Advantage of this facility can be availed by an organization to fill up its man power requirement. The employment exchange does not charge any thing for providing list of suitable candidates.
- **Direct recruitment**: For recruitment of unskilled or causal labor, the employer notifies the requirement in their notice board. Interested applicants report at specified venu at specified date for selection.
- **Unsolicited Applications**: Many job seekers submit their applications to different organization at different times seeking employment even if there is no vacancy in the organization. The personnel department maintains the record of such applications. Whenever vacancy arises these applicants can be called to take part in recruitment process.
- **Recommendations**: Sometimes appointments are made by the recommendation of the committees, VIPs, friends or relatives etc provided they qualify for the posts.
- **Labor contractors**: Labor intensive organizations usually meet their need of unskilled, skilled or semiskilled man power as and when required through labor contractors who are registered with them. There by they avoid to create a permanent establishment for the laborers.
- **Placement cell of Universities and institutes**: Most institutions keep records of their pass out students Their placement cell remain in touch with different organizations for arranging jobs for their pass out students. Employers take advantage of this facilities for their recruitment.
- **Other similar Organizations**: For experienced hands or top management posts sometimes organizations depend upon similar organizations, competitors etc who have adequate number of such personnel. They attract such personnel by offering better pay scale, facilities perquisites etc.

Method of Recruitment:

The different methods of recruitment are:

i) **Direct method**: The employer or the recruitment officer of the employer goes to the prospective source to recruit their needed man power like campus interviews. Sometimes employer may request the principal of different institutions to sponsor the names of three or four deserving students of the final year with complete bio-data do that the employer can directly call them for interview.

ii) : **Indirect method**: This method is widely used. In this process candidates come to the employer for attending the selection process. Wide publication through different advertising media is given by the organization for recruitment of their required man power or they resort to walk in interviews with prior advertisement.

- **Auction sale**: This sale process is a competition among the buyers. The seller fixes a base price for the goods or commodities to be auctioned and gives wide publication though different media for auction sale giving the date of auction and venue. The buyers want to take part in the auction bidding are asked to deposit a security amount and take part in bidding. The highest caller at the drop of the hammer wins the bid. Security deposit of the unsuccessful bidders are returned.
- **Counter sale**. Some producers open selling counters at their factory itself or at important places to sell their product directly to users. No middle man is involved in this.
- **Networking**: This is also known as multi level marketing (MLM). Here the buyers promote sale in a chain. One buyer if sells the product to three other buyers he gets monetary incentive. Again those three buyers each try to sell to other three to get incentive. Like that the chain goes on multiplying. As the chain goes on increasing the incentive goes on increasing at different slabs from bottom to top. Here the producer does not have to appoint selling agents or open show rooms nor he spends on advertisement.

Human Resource Management.

Different source of recruitment:

Internal sources:

a) **Transfer:** Immediate requirement can be met by transferring eligible employees from one post to other or from one job to other of similar nature.. No financial burden is involved.

b)**Promotion**: In this scheme positions or posts can be filled up by upgrading persons to higher status by giving promotion. Here there is a change in nature of duties, status, responsibility and accountability.

c)Own Training centers: Big organizations have their own training institutes where they train people continuously. The course or trades for training are usually designed to meet their own requirements. Mostly such organizations absorbs top ranked successful trainees in their organization.

External sources:

- **Advertisement**: Applications are invited for different posts through open advertisement. Candidates fulfilling the eligibility criteria are to go through different stages like written tests, viva-voce test etc for selection.
- **Campus recruitment**: Companies and public sector organizations hold campus interviews in professional institutes to recruit young and fresh talents. The placement cells in these institutions provide all assistance in holding the campus interviews. Initially the fresh recruits are taken on probation as trainees. After successful training they are absorbed in a post.
- **Walk-in- interviews**. For immediate requirement companies are holding walk-in interviews at different towns and cities. Advertisement for such interview are given in news papers giving details of venue and date. In this process no prior applications are required.
- **Employment fair or Job Mela**: A number of employers and consultants combined together hold employment fair in important places with prior advertisement to recruit new employees. Inside the mela all instructions are displayed prominently to guide the aspirants.

iii) **Third party Method**: In this method employment is done though employment exchange/ private employment bureau, consultants, Agents etc.

Selection Methods: The steps involved in selection process are:

i) **Inviting applications**: This is the first step in selection process. Applications in pre designed format are invited from desirous candidates through advertisement or request letter to the placement cells of institutions either by the employer or his recruitment consultant.

ii) **Screening the applications received**.: Screening process is necessary to limit the number of applications for effective and easy selection process. For this a screening committee is formed with chalk out the screening criteria before hand. Accordingly only the applications which pass the screening criteria are considered for next stage of selection process.

Iii) Conducting written tests/ On-line test: The valid applicants after screening are called for written test. The test is designed to know the skill, intelligence, aptitude etc.

Iv) Interviews : The candidates who succeed in written test are called for attending interview and group discussions. The interview is meant mainly to select the best candidates for the organization. During interview and group discussions, the personality, skill, general knowledge, leadership quality, intelligence etc are tested.

V) Physical & Medical fitness test. These tests are carried out by a group of qualified experts to ensure the sound health of the candidates.

vi) Checking the antecedents: There is a need of checking the antecedents and collecting information about the candidate: Usually in the application form the applicant is asked to provide names of at least two persons of position known to him. If the candidate is previously employed, he has to give the details of previous employer. The information about the candidate and his antecedents can be collected from the above source. Some times local police verification report is sought before final appointment to know about his criminal background if any.

Vii) Verification of original certificates and documents: At the final stage the successful candidates are asked to come with original certificates for verification.

Viii) Issue of appointment letter: All the successful candidates are to be ranked in order of merit and a list of such merit list is maintained for a definite period of time after which the list becomes null and void. During this validity period as and when required appointment letter is issued to candidates in order of merit. In case a candidate fails to join within stipulated time the next candidate in the list is given the opportunity.

Different Training methods:

- **On the job Training**: In this category three methods are generally adopted .
- **Under-studies:** Under this scheme a trainee is posted under an experienced person as his assistant and acquires skill, knowledge, experience by doing the job under direct supervision & guidance of the experienced person. In the process he becomes to handle job independently in a very short time.
- **Coaching by experts on the job**: Under this scheme trainees are taken to sports where the jobs are being performed. Different expert trainers of different jobs train the trainees the art of performing the jobs. They first demonstrate the jobs by actually performing them in front of the trainees and then the trainees are given the opportunity to do the jobs independently under the guidance of the trainers.

- **Job Rotation**: Under this system trainees get opportunity of learning different jobs during their employment on rotation basis. After they are trained on one job, they are sent to be trained on another job and in the process they acquire experience on different jobs of the organization.

- **Off-the-line Training**: The following training methods are under this type.

i) **Classroom Training**: Under this method both theoretical and practical courses are devised for imparting training to the employees either inside the organization or out side. For such training models, slides, audio visual aid etc are used. The trainers are expert class room trainers.

ii) **Conference**: Under this method of training a small group trainees are selected. They themselves learn by open discussion, exchange of ideas and experience. This type of training is suitable for a homogeneous trainees preferable of supervisor level.

iii) Written Instruction: Here printed elaborate instructions are supplied to the trainees which are designed in such way that it would be able to solve all the questions arising in the minds of the trainees. By going through the instructions the trainees learn the technique, process and skill.

Iv Institutional training: There are professional training institute or organizations which impart training on specific fields. Such institute have permanent infrastructures and experienced and professional trainers. So trainees can be sent to such institutions for training on specific job.

V) On-Line –Training: Help of internet can be availed to acquire knowledge and to remain in touch with quality trainers, quality instructions from any corner of the world.

vi) **Vestibule Training**: In this method actual work condition is created or simulated and the trainees feel doing the actual job. As far as possible actual machines and actual materials are used. Eg. Training of firemen, Training of pilots through e-simulation method.

Need for Performance appraisal:

- It is useful to identify employees' need for training and area of training.
- It is needed to determine the salaries or wages if they are based on quality and quantity of production.
- It is useful to assess strengths , weaknesses, merits and demerits of the employee.
- To determine the eligibility of the employee for promotion.
- To single out employees for reward or punishment.
- Helpful to fix the target, assign additional duties or reduce work burden.
- Helps for self development of employees because they could know their weak points.
- It creates awareness among the employees because they know that their performances are being monitored. This motivates the employees to give their best.
- It helps to make the workers, supervisors, managers and subordinates more vigilant, because some of them supervise and some of them are supervised.
- It is essential to decide transfer of employees from one job to another with justification to promote and preserve efficiency.

- Helps to determine the training policy, wage policy, incentive plan, promotion police of the organization.
- It is need for manpower planning.

Industrial sickness:

Meaning:

According to RBI ' an industrial unit is regarded as sick, if it has accrued cash loss for one year and in the judgment of the Bank it is like to continue to incur cash loss in the two following years and it has imbalance in its financial structure, such as current ratio being less than 1:1 and worsening debt-equity ratio'

Explanation: If the current ratio i.e current assets to current liabilities is less than 1:1 and the debt-equity ratio i.e outsiders' fund to own fund worsens the unit is considered to be sick. The desirable current ratio and the debt-equity ration should be 2:1 and 1:1 respectively for good financial health of the unit.

Causes of sickness

Internal causes:

- **Obsolete technology**: Old and out-dated machineries decrease the overall efficiency & quality and increases the cost of production leading to sickness.
- **Non-Flexibility**: Lack of flexibility for structural changes needed under the changing business environment may lead to sickness.
- **Financial mismanagement**: Financial mismanagement like diversion of funds to uneconomic or unprofitable activities or non-business activities like marriages, construction of residential home, higher education of children, purchase of personal vehicles, political donations, extortion etc causes sickness.
- **Poor industrial relations**: Poor industrial relation between management and the workers result in workers unrest like strikes, agitation, go-slow movement etc which hampers the production and leads to sickness.
- **Inefficient management**: A well equipped industrial unit with all facilities and provisions is bound to become sick for lack of proper management. An efficient management is capable of converting losses to profit.
- **Inefficient sale and marketing strategy**: Even if there is qualitative and cost efficient products, due to poor and inefficient sales and marketing efforts other competitors will capture the hearts of the customers. The goods will not meet the sales target and will lie in the stock blocking the working capital will detoriate the financial health and lead to sickness of the unit.
- **Higher cost:** If the cost of production is high compared to similar product of other competitors, the product will not find the market and the unit ultimately will become sick. Higher cost may be due to inefficiency, too much labor dependency, high input cost, more wastage and breakage etc.
- **Wrong selection and placement of workers**: If inefficient and inappropriate work force is recruited or even if efficient and proper man power is there but their placement is inappropriate the unit will become sick.

- **Unnecessary expansion**, modernization and diversion: without proper study and market analysis if expansion, modernization and diversion are taken up huge capital gets blocked without any return or poor return. Ultimately the unit become sick due to financial crunch.
- **Poor inventory management**: over procurement and under procurement leads to blockage/ shortage of working capital. Further if procurement of input materials are not done timely it will result in idleness of men and machineries. As a result the input cost will go up and the product will be costly.
- **Poor quality control**: Poor quality control will ultimately produce substandard material which will loose the market. Further, there will be more spoilage and breakage which will increase the cost of production. The unit will automatically become sick.
- **Higher wastage**. If there is higher wastage or idleness of resources like men, materials, and money the cost of production will go high for which the unit will become sick.
- **Increased R & M cost**: Apart from preventive or scheduled maintenance, if the forced break down frequency increases the machine hours will be lost which will result in lower productivity and hence sickness of the unit.
- **Over capitalization and under-capitalization**: Over capitalization blocks the money which will result in poor ROR and lower profit. Such a situation will gradually make the unit sick Similarly under capitalization will lead to over working of both men and machinery which will result in high labor cost and high rate of depreciation for the machineries. This will boost up the production cost and the sickness of the unit.

External causes:

- **None acceptance of product by the customers**. If the product can not impress the customers in comparison to other similar products available in the market due to any reason, the unit becomes sick:
- **Change in test, fashion and custom of the customers**: If the unit can not cope up with the change in taste, fashion, customs attitude of he customers by up to date market study, the product will loose customers in the market and become sick.
- **Shortage of raw materials**: Scarcity of input raw materials in the market which is beyond the control of the management result in idleness of men materials and machineries which leads to sickness of the unit.
- **Shortage of power**: Industries having no captive power plants depend on power supply from electric supply utilities. If there is frequent shortage of power the industry may become sick.
- **Shortage of finance**. If the working capital can not be arranged in time from the from financing institutions, the firm will loose credibility of the raw material suppliers as well as selling agents/customers which leads to sickness of the firm.
- **Sickness of dealers' business**: If the business of the some of the selling agents of product of the industry becomes sick then customer net work is reduced which reduces the sale target and the industry become sick.

Module # 3

- **FACTORIES ACT , 1948**

FACTORIES ACT, 1948

❖This Act may be called the Factories Act, 1948.

❖ It extends to the whole of India

❖It shall came into force on the 1st day of April, 1949

Definitions

❖"adult" means a person who has completed his eighteenth year of age

❖"adolescent" means a person who has completed his fifteenth year of age but has not completed his eighteenth year

❖child means a person who has not completed his fifteenth year of age

❖young person" means a person who is either a child or an adolescent

Definitions

"day" means a period of twenty-four hours beginning at midnight;

❖"week" means a period of seven days beginning at midnight on Saturday night

❖"calendar year" means the period of twelve months beginning with the first day of January in any year

❖"power" means electrical energy, or any other form of energy which is mechanically transmitted and is not generated by human or animal agency;

❖"prime mover" means any engine, motor or other appliance which generates or otherwise provides power;

Definitions

❖"manufacturing process" means any process for-

❖(i) making, altering, repairing, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing, or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; or

❖(ii) pumping oil, water, sewage or any other substance; or

❖(iii) generating, transforming or transmitting power; or

❖(iv) composing types for printing, printing by letter press, lithography, photogravure or other similar process or book binding

❖(v) constructing, reconstructing, repairing, refitting, finishing or breaking up ships or vessels;

❖(vi) preserving or storing any article in cold storage;

Definitions

- "worker" means a person employed, directly or by or through any agency (including a contractor)
- with or without the knowledge of the principal employer,
- whether for remuneration or not,
- in any manufacturing process, or
- in cleaning any part of the machinery or premises used for a manufacturing process, or
- in any other kind of work incidental to, or connected with, the manufacturing process, or
- but does not include any member of the armed forces of the Union

Definitions

- "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 were working on any day of the preceding twelve 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

Definitions

- "occupier" of a factory means
- the person who has ultimate control over the affairs of the factory
- in the case of a firm or other association of individuals, any one of the individual partners or members thereof shall be deemed to be the occupier;
- in the case of a company, any one of the directors shall be deemed to be the occupier;
- in the case of a factory owned or controlled by the Central Government or any State Government, or any local authority, the person appointed to manage the affairs of the factory Government shall be deemed to be the occupier

4. Power to declare different departments to be separate factories or two or more factories to be a single factory

- The State Government may, on its own or on an application made by an occupier,
- direct that different departments or branches of a factory shall be treated as separate factories or
- two or more factories shall be treated as a single factory

5. Power to exempt during public emergency

- ❖In case of public emergency the State Government may,
- ❖exempt any factory from all or any of the provisions of this Act
- ❖ for such period and subject to such conditions as it may think fit
- ❖No such notification shall be made for a period exceeding three months at a time.

6. Approval, licensing and registration of factories

- ❖Making application to the government
- ❖If on an application for permission accompanied by the plans and specifications required by the rules
- ❖sent to the State Government or Chief Inspectors by registered post,
- ❖And no order is communicated to the applicant
- ❖within three months from the date on which it is so sent,
- ❖the permission shall be deemed to have been granted.
- ❖If the application is rejected appeal can be made to the government within thirty days of the date of such rejection.

7. Notice by occupier

- ❖ (1) The occupier shall, at least fifteen days before he begins to occupy or use any premises as a factory, send a notice to the Chief Inspector containing-
- ❖ (a) The name and situation of the factory;
- ❖ (b) the name and address of the occupier;
- ❖(bb) the name and address of the owner of the premises
- ❖(c) the address to which communications relating to the factory may be sent;
- ❖(d) the nature of the manufacturing process
- ❖(e) the total rated horse power installed or to be installed in the factory
- ❖(f) the name of the manager of the factory for the purposes of this Act
- ❖(g) the number of workers likely to be employed in the factory
- ❖(i) such other particulars as may be prescribed.

7A. General duties of the occupier

- ❖occupier shall ensure, the health, safety and welfare of all workers while they are at work in the factory.
- ❖ every occupier shall prepare, a written statement of his general policy with respect to the health and safety of the workers
- ❖bring such statement and any revision thereof to the notice of all the workers

8. Inspectors of Factory

- State government may appoint Chief Inspector
- Additional Chief Inspectors, Joint Chief Inspectors and Deputy Chief Inspectors and Inspectors of factory
- Prescribe their duties and qualifications
- Every District Magistrate shall be an Inspector for his district
- Every inspector is deemed to be a public servant within the meaning of the Indian Penal Code

9. Powers of Inspectors

- Enter factory premises for investigation
- Examine the premises
- inquire into any accident or dangerous occurrence
- require the production of any prescribed register or document
- seize, or take copies of, any register, record or other document
- take measurements and photographs and make such recordings
- exercise such other powers as may be prescribed
- no person shall be compelled under this section to answer any question or give any evidence tending to incriminate himself

10. Certifying surgeons

- State Government may appoint qualified medical practitioners to be certifying surgeons
- Duties of surgeons
- a) the examination and certification of young persons under this Act;
- (b) the examination of persons engaged in factories in such dangerous occupations or processes
- C) supervising the factories where
- (i) cases of illness have occurred which are due to the nature of the manufacturing process or
- (ii) due to manufacturing process there is a likelihood of injury to the health of workers or
- (iii) young persons are employed in any work which is likely to cause injury to their health.

11. Cleanliness

- Every factory shall be kept clean and free from effluents
- accumulation of dirt and refuse shall be removed daily
- floor of every workroom shall be cleaned at least once in every week by washing, using disinfectant
- effective means of drainage shall be provided and maintained
- all inside walls and partitions, ceilings, doors, windows shall be painted at prescribed intervals

12. Disposal of wastes and effluents

❖Effective arrangements shall be made for

❖the treatment of wastes and effluents

❖caused due to the manufacturing process carried on therein,

❖so as to render them innocuous, and for their disposal.

13. Ventilation and temperature

❖suitable provision shall be made in every factory for

❖adequate ventilation by the circulation of fresh air

❖such a temperature as will secure to workers therein reasonable conditions of comfort and prevent injury to health

❖walls and roofs shall be of such material and so designed that such temperature shall not be exceeded but kept as low as practicable

14. Dust and fume

❖effective measures shall be taken to

❖prevent its inhalation and accumulation in any workroom, and

❖if any exhaust appliance is necessary for this purpose,

❖it shall be applied as near as possible to the point of origin of the dust, fume or other impurity,

❖and such point shall be enclosed so far as possible.

15. Artificial humidification

❖factories in which the humidity of the air is artificially increased

❖State government shall prescribe the standard of humidification

❖the water used for the purpose shall be taken from a public supply, or other source of drinking water,

❖shall be effectively purified before it is so used.

16. Overcrowding

❖There shall be 4.2 cubic metres of space for every worker employed therein, and

❖for this purpose no account shall be taken of any space which is more than 4.2 metres above the level of the floor of the room.

❖notice specifying the maximum number of workers, which can be employed in any work room shall be displayed in the premises

17. Lighting

❖In every part of a factory sufficient lighting shall be maintained

❖all glazed windows and skylights used for the lighting of the workroom shall be kept clean

❖provision shall, be made for the prevention of glare, either directly from a source of light or by reflection from a smooth or polished surface

❖formation of shadows to such an extent as to cause eye-strain or the risk of accident to any worker shall be prevented.

18. Drinking water

❖Adequate facilities for wholesome drinking water shall be made at convenient places in the factory

❖All such points shall be legibly marked "drinking water"

❖no such point shall be situated within six metres of

❖any washing place, urinal, latrine, spittoon, open drain carrying silages or effluent or any other source of contamination.

❖Factories wherein more than two hundred and fifty workers are ordinarily employed, provisions shall be made for cooling drinking water during hot weather

19. Latrines and urinals

❖sufficient latrine and urinal of prescribed types shall be provided

❖separately for male and female workers

❖They should be properly lighted and ventilated, and

❖no latrine or urinal shall, communicate with any workroom except through an intervening open space or ventilated passage

❖be maintained in a clean and sanitary condition at all times;

❖sweepers shall be employed to clean latrines, urinals and washing places.

20. Spittoons

❖In every factory sufficient number of spittoons shall be maintained

❖in convenient places and

❖they shall be maintained in a clean and hygienic condition.

❖No person shall spit within the premises of a factory except in the Spittoons provided for the purpose

❖Whoever spits in places other than spittoons within factory premises shall be punishable with fine not exceeding five rupees.

23. Employment of young persons on dangerous machines

❖No young person shall be allowed to work at any dangerous machine

❖unless he has been fully instructed as to the dangers arising in connection with the machine and the precautions to be observed

❖has received sufficient training in work at the machine, or

❖is under adequate supervision by a person who has a through knowledge and experience of the machine.

27. Prohibition of employment of women and children near cotton-openers

❖No woman or child shall be employed in any part of a factory for pressing cotton in which a cotton opener is at work without prior approval of the inspector of factories

CHAPTER V : WELFARE

❖facilities for washing shall be provided and maintained for the use of the male and female workers separately

❖such facilities shall be conveniently accessible and shall be kept clean

❖Facilities for storing and drying cloth

❖suitable arrangements for sitting shall be provided and maintained for all workers

❖first-aid boxes or cupboards, equipped with the prescribed contents one for every one hundred and fifty workers in charge of a person trained in first aid.

❖ Ambulance room in every factory wherein more than five hundred workers are employed

❖Canteen in the factory wherein more than two hundred and fifty workers are ordinarily employed,

❖Rest room/lunch room in factories employing more than one hundred and fifty workers with provision for drinking water, where workers can eat meals brought by them

CHAPTER V : WELFARE

❖Creche facility if more than thirty women are employed (for the children below six years of age of such working women).

❖Adequately spaced, lighted and ventilated

❖Milk and refreshments for the children

❖To be in charge of a trained female staff

❖Allowing mothers to feed the kids at periodic intervals

❖Welfare Officer for factory wherein five hundred or more workers are employed

CHAPTER VI : WORKING HOURS OF ADULTS

❖ **51. Weekly hours Not more than 48 hours a week**

❖**52. First day of the week shall be a weekly holiday or**

❖**one of the days three days before or after the said first day.**

❖**A notice is delivered to the inspector of factories**

❖**A notice is displayed in the factory notice board**

❖**Cannot be allowed to work continuously for more than ten days without a full day holiday**

❖**53. Compensatory holidays**

❖**Where a weekly holiday is denied he shall be allowed to avail the compensatory holiday within a month.**

CHAPTER VI : WORKING HOURS OF ADULTS

❖**54. Daily working hours- no adult worker shall be allowed to work in a factory for more than nine hours in any day**

❖**55. Intervals for rest-no worker shall work for more than five hours before he has had an interval for rest of at least half an hour.**

❖**Inspector may increase it upto six hours**

❖**56. Spread over -inclusive of rest intervals they shall not spread over more than ten and a half hours in any day**

❖**Inspector may increase the spread over up to 12 hours**

❖**59. Extra wages for overtime-wages at the rate of twice his ordinary rate of wages**

❖**60. Restriction on double employment-No adult worker shall be required or allowed to work in any factory on any day on which he has already been working in any other factory**

❖**61. Notice of periods of work for adults should be displayed in the notice board.**

CHAPTER VI : WORKING HOURS OF ADULTS

❖**62. Register of adult workers**

❖register of adult workers, to be available to the Inspector at all times during working hours, or when any work is being carried on in the factory, showing,-

❖(a) the name of each adult worker in the factory;

❖(b) the nature of his work;

❖(c) the group, if any, in which he is included;

❖(d) where his group works on shifts, the relay to which he is allotted; and

❖(e) such other particulars as may be prescribed :

Women not to work at night

- prohibition of women workers at night shift
- women shall not be allowed to work in any factory except between the hours of 6 A.M. and 7 P.M..
- The inspector may relax this norm but prohibited between 10 P.M. and 5 A.M.
- 67. Prohibition of employment of young children
- Children who have not completed at least 14 years of age are not allowed to work in factory
- for children above 14 years of age and adolescent persons
- certificate of fitness issued by the certifying surgeons is required for working in the factory.
- Children and adolescents are not allowed to work in night shift

71, 72 & 73. Working hours for children

- No child shall be employed in any factory
- for more than four and a half hours in any day.
- during the night.
- there shall not be more than two shifts for children
- Shifts shall not be changed in less than a month time
- No female child shall be allowed to work except between 8 A.M. and 7 P.M
- Notice of working hours for children should be properly displayed in the notice board
- Register of children employed should be maintained in prescribed form.

CHAPTER VIII : ANNUAL LEAVE WITH WAGES

- Every worker who has worked for at least 240 days in a year will be eligible for leave with wages as under
- if an adult, one day for every twenty days of work performed
- if a child, one day for every fifteen days of work performed
- This is exclusive of all holidays
- Such leave is encashable in case of retirement, resignation, death, disablement
- leave that may be carried forward to a succeeding year shall not exceed thirty in the case of an adult or forty in the case of a child
- Fifteen days notice is required for sanction and availing leave (30 days in public utility)
- Can be availed upto three times in a year
- Un availed leave cannot be adjusted against notice period for dismissal/discharge
- Such leave shall be with full pay