



SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

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SCHOOL OF ELECTRICAL AND ELECTRONICS

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

UNIT 2 – PRINCIPLES OF MANAGEMENT AND PROFESSIONAL ETHICS - SBA1101

UNIT – 2 MANAGEMENT OF ORGANISATION

Forms of Business – Industrial Ownership, Sole Trade, Partnership, Company. Performance Appraisal – Basic principles – Pitfalls – Methods to overcome. Industrial Safety – Causes of accidents – How to minimize accidents. Plant Layout and Maintenance – Need, Types and Managerial Aspects

Business Organisation - Introduction

Business: Business means the state of being busy, in other words those activities which involve production of wealth. A business is an enterprise which means distributes or provides an article or services which other members of the community need and are able and willing to pay for it. Business organisation refers to all necessary arrangements required to conduct a business. It refers to all those steps that need to be undertaken for establishing relationship between men, material, and machinery to carry on business efficiently for earning profits. This may be called the process of organizing. The arrangement which follows this process of organizing is called a business undertaking or organisation. A business undertaking can be better understood by analyzing its characteristics.

Characteristics

1. **Distinct Ownership:** The term ownership refers to the right of an individual or a group of individuals to acquire legal title to assets or properties for the purpose of running the business. A business firm may be owned by one individual or a group of individuals jointly.
2. **Lawful Business:** Every business enterprise must undertake such business which is lawful, that is, the business must not involve activities which are illegal.

3. **Separate Status and Management:** Every business undertaking is an independent entity. It has its own assets and liabilities. It has its own way of functioning. The profits earned or losses incurred by one firm cannot be accounted for by any other firm.

4. **Dealing in goods and services:** Every business undertaking is engaged in the production and/or distribution of goods or services in exchange of money.

5. **Continuity of business operations:** All business enterprise engage in operation on a continuous basis. Any unit having just one single operation or transaction is not a business unit.

6. **Risk involvement:** Business undertakings are always exposed to risk and uncertainty. Business is influenced by future conditions which are unpredictable and uncertain. This makes business decisions risky, thereby increasing the chances of loss arising out of business.

Forms of Business

The most important forms of business organisation are as follows: A. Sole Proprietorship

B. Partnership

C. Joint Stock Company

D. Private Limited Company

E. Co-operative Society

A. Sole proprietorship

A sole proprietorship is the oldest and the most common form of business. It is a one-man organisation where a single individual owns, manages and controls the business.

Characteristics:

1. **Ownership:** The business enterprise is owned by one single individual that is the individual has got legal title to the assets and properties of the business. The entire profit arising out of business goes to the sole proprietor. Similarly, he also bears the entire risk or loss of the firm.

2. **Management:** The owner of the enterprise is generally the manager of the business. He has got absolute right to plan for the business and execute them without any interference from anywhere. He is the sole decision maker.

3. **Source of Capital:** The entire capital of the business is provided by the owner. In addition to his own capital he may raise more funds from outside through borrowings from close relatives or friends, and through loans from banks or other financial institutions.

4. **Legal Status:** The proprietor and the business enterprise are one and the same in the eyes of law. There is no difference between the business assets and the private assets of the sole proprietor. The business ceases to exist in the absence of the owner.

5. **Liability:** The liability of the sole proprietor is unlimited. This means that, in case the sole proprietor fails to pay for the business obligations and debts arising out of business activities, his personal property can be used to meet those liabilities.

6. **Stability:** The stability and continuity of the firm depend upon the capacity, competence and the life span of the proprietor.

7. **Legal Formalities:** In the setting up, functioning and dissolution of a sole proprietorship business no legal formalities are necessary. However, a few legal restrictions may be there in setting up a particular type of business. For example, to open a restaurant, the sole proprietor needs a license from the local municipality; to open a chemist shop, the individual must have a license from the government.

Advantages of Sole Proprietorship:

1. **Easy Formation:** The biggest advantage of a sole tradership business is its easy formation. Anybody wishing to start such a business can do so in many cases without any legal formalities.

2. **Better Control:** The owner has full control over his business. He plans, organises, co-ordinates the various activities. Since he has all authority, there is always effective control.

3. **Prompt Decision Making:** As the sole trader takes all the decisions himself the decision making becomes quick, which enables the owner to take care of available opportunities immediately and provide immediate solutions to problems.

4. **Flexibility in Operations:** One man ownership and control makes it possible for change in operations to be brought about as and when necessary.

5. **Retention of Business Secrets:** Another important advantage of a sole proprietorship business is that the owner is in a position to maintain absolute secrecy regarding his business activities.

6. **Direct Motivation:** The owner is directly motivated to put his best efforts as he alone is the beneficiary of the profits earned.

7. **Personal Attention to Consumer Needs:** In a sole tradership business, one generally finds the proprietor taking personal care of consumer needs as he normally functions within a small geographical area.

8. Creation of Employment: A sole tradership business facilitates self-employment and also employment for many others. It promotes entrepreneurial skill among the individuals.

9. Social Benefits: A sole proprietor is the master of his own business. He has absolute freedom in taking decisions, using his skill and capability. This gives him high self-esteem and dignity in the society and gradually he acquires several social virtues like self-reliance, self-determination, independent thought and action, initiative, hard work etc.,. Thus, he sets an example for others to follow.

10. Equitable Distribution of Wealth: A sole proprietorship business is generally a small scale business. Hence there is opportunity for many individuals to own and manage small business units. This enables widespread dispersion of economic wealth and diffuses concentration of business in the hands of a few.

Disadvantages of Sole Proprietorship:

1. Unlimited Liability: In sole proprietorship, the liability of business is recovered from the personal assets of the owner. It restricts the sole trader to take more risk and increases the volume of his business.

2. Limited Financial Resources: The ability to raise and borrow money by one individual is always limited. The inadequacy of finance is a major handicap for the growth of sole proprietorship.

3. Limited Capacity of Individual: An individual has limited knowledge and skill. Thus his capacities to undertake responsibilities, his capacity to manage, to take decisions and to bear the risks of business are also limited.

4. Uncertainty of duration: The existence of a sole tradership business is linked with the life of the proprietor. Illness, death or insolvency of the owner brings an end to the business. The continuity of business operation is, therefore, uncertain.

Suitability of Sole Proprietorship Form

From the discussion of the advantages and disadvantages of sole proprietorship above, it is clear that this form of business organization is most suited where:

1. The amount of capital is small
2. The nature of business is simple in character requiring quick decisions to be taken
3. Direct contact with the customer is essential and

4. The size of demand is not very large.

These types of conditions are satisfied by various types of small business such as retail shops, legal or medical or accounting profession, tailoring, service like dry cleaning or vehicle repair etc. hence sole proprietor form of organization is mostly suitable for these lines of businesses. This form of organization also suits those individuals who have a strong drive for independent thinking and highly venturesome in their attitude.

B. Partnership

Meaning

A partnership form of organisation is one where two or more persons are associated to run a business with a view to earn profit. Persons from similar background or persons of different ability and skills, may join together to carry on a business. Each member of such a group is individually known as **partner** and collectively the members are known as a **partnership firm**. These firms are governed by the Indian Partnership Act, 1932.

Characteristics:

1. **Number of Partners:** A minimum of two persons are required to start a partnership business. The maximum membership limit is 10 in case of banking business and 20 in case of all other types of business.

2. **Contractual Relationship:** The relation between the partners of a partnership firm is created by contract. The partners enter into partnership through an agreement which may be verbal, written or implied. If the agreement is in writing it is known as a **Partnership Deed**.

3. **Competence of Partners:** Since individuals have to enter into a contract to become partners, they must be competent enough to do so. Thus, minors, lunatics and insolvent persons are not eligible to become partners.

However, a minor can be admitted to the benefits of partnership i.e. he can have a share in the profits.

4. **Sharing of Profit and Loss:** The partners can share profit in any ratio as agreed. In the absence of an agreement, they share it equally.

5. **Unlimited Liability:** The partners are liable jointly and severally for the debts and obligations of the firm. Creditors can lay claim on the personal properties of any individual partner or all

the partners jointly. The liability of a minor is, however, limited to the extent of his share in the profits, in case of dissolution of a firm.

6. Principal-Agent Relationship: The business in a partnership firm may be carried on by all the partners or any one of them acting for all. This means that every partner is an agent when he is acting on behalf of others and he is a principal when others act on his behalf. It is, therefore, essential that there should be mutual trust and faith among the partners in the interest of the firm.

7. Transfer of Interest: No partner can sell or transfer his interest in the firm to anyone without the consent of other partners.

8. Legal Status: A partnership firm is just a name for the business as a whole. **The firm means partners and the partners mean the firm.** Law does not recognise the firm as a separate entity distinct from the partners.

9. Voluntary Registration: Registration of partnership is not compulsory. But since registration entitles the firm to several benefits, it is considered desirable. For example, if it is registered, any partner can file a case against other partners, or a firm can file a suit against outsiders in case of disputes, claims, disagreements, etc.

10. Dissolution of Partnership: Dissolution of partnership implies not only a complete closure or termination of partnership business, but it also includes any change in the existing agreement among the partners due to a change in the number of partners.

Advantages of Partnership Firm:

1. Easy Formation: A partnership can be formed without many legal formality and expenses. Every partnership firm need not be registered.

2. Larger Resources: As compared to sole proprietorship, a partnership firm can pool larger financial resources. Thus it can enter into bigger operations and can have more credit facilities. It can also have better managerial talent.

3. Flexibility in operation: Flexibility is due to a limited number of partners. These partners can change their operations and amend objectives if necessary by mutual consent.

4. Better Management: Partners take more interest in the affairs of business as there is a direct relationship between ownership, control and profit. They often meet to discuss the affairs of business and can take prompt decision.

5. **Sharing of Risk:** In partnership, risk of loss is easier to bear by individual partners as it is shared by all the partners.

6. **Protection of minority interest:** Every partner has an equal say in decision making. A partner can prevent a decision being taken if it adversely affects his interests. In extreme cases a dissenting partner may withdraw from partnership and can dissolve it.

7. **Better Public Relations:** In a partnership firm the group managing the affairs of the firm is generally small. It facilitates cordial relationship with the public.

Disadvantages of partnership Firm:

1. **Instability:** A partnership firm does not continue to exist indefinitely. The death, insolvency or lunacy of a partner may bring about an unexpected end to partnership.

2. **Unlimited Liability:** As the liability of partners is joint and several to an unlimited extent, any one of the partners can be called upon to pay all the debts even from his personal properties. Further, as every partner has a right to take part in the management of the firm, any wrong decision by a single partner may lead to heavy liabilities for others.

3. **Lack of Harmony:** Since every partner has equal right, there are greater possibilities of friction and quarrel among the partners. Differences of opinion may lead to mistrust and disharmony which may ultimately result in disruption and closure of the firm.

4. **Limited Capital:** As there is a restriction on the maximum number of partners, the capital which can be raised is limited.

Suitability of Partnership Firm:

In a partnership firm, persons from different walk of life having ability, managerial talent and skill join together to carry on a business. This increases the administrative strength of the organisation, the financial resources, the skill and expertise, and reduces risk. Such firms are most suitable for comparatively small business such as retail and wholesale trade, professional services, medium sized mercantile houses and small manufacturing units. Generally it is seen that many organizations are initially started as partnership firms and later, when it is economically viable and financially attractive for the investors, it is converted into a company.

C. Joint Stock Company/ Public Limited Company:

A public limited company is a voluntary association of members which is incorporated and, therefore has a separate legal existence and the liability of whose members is limited.

Characteristics:

1. **Artificial Person:** A Joint Stock Company is an artificial person in the sense that it is created by law and does not possess physical attributes of a natural person. However, it has a legal status.
2. **Separate Legal Entity:** Being an artificial person, a company has an existence independent of its members. It can own property, enter into contract and conduct any lawful business in its own name. It can sue and can be sued in the court of law. A shareholder cannot be held responsible for the acts of the company.
3. **Common Seal:** Every company has a common seal by which it is represented while dealing with outsiders. Any document with the common seal and duly signed by an officer of the company is binding on the company.
4. **Perpetual Existence:** A company once formed continues to exist as long as it fulfils the requirements of law. It is not affected by the death, lunacy, insolvency or retirement of any of its members.
5. **Limited Liability:** The liability of a member of a Joint Stock Company is limited by guarantee or the shares he owns. In other words, in case of payment of debts by the company, a shareholder is held liable only to the extent of his share.
6. **Transferability of Shares:** The members of a company are free to transfer the shares held by them to anyone else.
7. **Formation:** A company comes into existence only when it has been registered after completing the formalities prescribed under the Indian Companies Act 1956. A company is formed by the initiative of a group of persons known as **promoters**
8. **Membership:** A company having a minimum membership of **two** persons and maximum **fifty** is known as a **Private Limited Company**. But in case of a Public Limited Company, the minimum is **seven** and the maximum membership is **unlimited**.
9. **Management:** Joint Stock Companies have democratic management and control. Even though the shareholders are the owners of the company, all of the them cannot participate in the management process. The company is managed by the elected representatives of shareholders known as **Directors**.
10. **Capital:** A Joint Stock Company generally raises a large amount of capital through issue of shares.

Advantages of Joint Stock Company:

1. **Limited Liability:** In a Joint Stock Company the liability of its members is limited to the extent of shares held by them. This attracts a large number of small investors to invest in the company. It helps the company to raise huge capital. Because of limited liability, a company is also able to take larger risks.
2. **Continuity of existence:** A company is an artificial person created by law and possesses independent legal status. It is not affected by the death, insolvency etc. of its members. Thus it has a **perpetual existence**.
3. **Benefits of large scale operation:** It is only the company form of organisation which can provide capital for large scale operations. It results in large scale production consequently leading to increase in efficiency and reduction in the cost of operation. It further opens the scope for expansion.
4. **Professional Management:** Companies, because of complex nature of activities and operations and large volume of business, require professional managers at every level of organisation. And because of their financial strength they can afford to appoint such managers. This leads to efficiency.
5. **Social Benefit:** A joint stock company offers employment to a large number of people. It facilitates promotion of various ancillary industries, trade and auxiliaries to trade. Sometimes it also donates money for education, health, community service and renders help to charitable and social institutions.
6. **Research and Development:** A company generally invests a lot of money on research and development for improved processes of production, designing and innovating new products, improving quality of product, new ways of training its staff, etc.

Disadvantages of Joint Stock Company:

1. **Formation is not easy:** The formation of a company involves compliance with a number of legal formalities under the companies Act and compliance with several other Laws.
2. **Control by a Group:** Companies are controlled by a group of persons known as the **Board of Directors**. This may be due to lack of interest on the part of the shareholders who are widely dispersed; ignorance, indifference and lack of proper and timely information. Thus, the democratic virtues of a company do not really exist in practice.

3. **Speculation and Manipulation:** The shares of a company are purchased and sold on the stock exchanges. The value or price of a share is determined in terms of the dividend expected and the reputation of the company. These can be manipulated. Besides, there is excessive speculation which is regarded as a social evil.

4. **Excessive government control:** A company is expected to comply with the provisions of several Acts. Non-compliance of these invites heavy penalty. This affects the smooth functioning of the companies.

5. **Delay in Policy Decisions:** A company has to fulfill certain procedural formalities before making a policy decision. These formalities are time consuming and, therefore, policy decisions may be delayed.

6. **Social abuses:** A joint stock company is a large scale business organisation having huge resources. This provides a lot of power to them. Any misuse of such power creates unhealthy conditions in the society e.g. having monopoly of a particular business, industry or product; influencing politicians and government in getting their work done; exploiting workers, consumers and investors.

Suitability of Joint Stock Company:

A joint stock company is suitable where the volume of business is quite large, the area of operation is widespread, the risk involved is heavy and there is a need for huge financial resources and manpower. It is also preferred when there is need for professional management and flexibility of operations. In certain businesses like banking and insurance, business can only be undertaken by joint stock companies.

D. Private Limited Company:

A private limited company is a voluntary association of not less than two and not more than fifty members, whose liability is limited, the transfer of whose shares is limited to its members and who is not allowed to invite the general public to subscribe to its shares or debentures.

A private company is preferred by those who wish to take the advantage of limited liability but at the same time desire to keep control over the business within a limited circle and maintain the privacy of their business.

Advantages

- **Limited Liability:** It means that if the company experience financial distress because of normal business activity, the personal assets of shareholders will not be at risk of being seized by creditors.
- **Continuity of existence:** business not affected by the status of the owner.
- **Minimum number of shareholders need to start the business** are only 2.
- **More capital can be raised** as the maximum number of shareholders allowed is 50.
- **Scope of expansion is higher** because easy to raise capital from financial institutions and the advantage of limited liability

Disadvantages

- The shares in a private limited company cannot be sold or transferred to anyone else without the agreement of other shareholders (not freely transferable)
- Not allowed to invite public to subscribe to its shares
- Scope for promotional frauds
- Undemocratic control

Difference between Sole Proprietorship and Partnership firm:

Basis	Sole Proprietorship	Partnership
1. Membership	Only one member	Minimum membership is two, maximum membership is ten incase of banking business twenty
2. Functioning	A sole trader manages his business at his free will.	May be managed by all partners or any one on behalf of all others.
3. Formation	Easy and can be formed at any time the	An agreement is required between the
4. Secrecy	Business secrets are not open to anyone	Business secrets are open to every
5. Finance	Scope for raising capital is limited	Scope for raising capital is relatively more.
6. Continuity of business	Comes to an end with the death of the sole	The business of a firm does not come
7. Decision Making	Owner alone takes decision and so it is	All partners must agree to important decisions and so decision making
8. Liability	Unlimited and burden is heavy	Unlimited but less burdensome as it is

Partnership and Joint Stock Company

Basis	Partnership	Joint Stock Company
1. Formation	It is easy to form as registration is not compulsory	It requires many legal formalities to be completed before the company comes into existence
2. Operation	Governed by the Partnership Act, 1932	Governed by the companies Act, 1956
3. Membership	Minimum is two, maximum is 10 in banking business and 20 in other business.	In case of Private Company minimum is 2, maximum is 50; in case of Public company minimum is 7 and maximum unlimited.
4. Legal Status	No separate legal entity	Separate legal entity from that of its members
5. Liability	Joint and several to an unlimited extent	Limited to the value of shares held for limited companies
6. Management	All or any one on behalf of all partners is are entitled	Only the Board of directors authorized
7. Transfer of shares	Consent of all partners required	Shares are freely transferable
8. Existence	Dissolves with the death, retirement or insanity of a partner etc.	Perpetual existence, unaffected by death, retirement, insolvency of the shareholders
9. Finance	Relatively limited scope for raising finance	Vast and unlimited scope for raising finance

Distinction Between A Public Company And a Private Company Following are the main points of difference between a Public Company and a Private Company:

1. Minimum Paid-up Capital: A company to be Incorporated as a Private Company must have a minimum paid-up capital of Rs. 1,00,000, whereas a Public Company must have a minimum paid- up capital of Rs. 5,00,000.
2. Minimum number of members: Minimum number of members required to form a private company is 2, whereas a Public Company requires atleast 7 members.
3. Maximum number of members: Maximum number of members in a Private Company is restricted to 50, there is no restriction of maximum number of members in a Public Company.
4. Transferability of shares: There is complete restriction on the transferability of the shares of a Private Company through its Articles of Association, whereas there is no restriction on the transferability of the shares of a Public company.
5. Issue of Prospectus: A Private Company is prohibited from inviting the public for subscription of its shares, i.e. a Private Company cannot issue Prospectus, whereas a Public Company is free to invite public for subscription i.e., a Public Company can issue a Prospectus.
6. Number of Directors: A Private Company may have 2 directors to manage the affairs of the company, whereas a Public Company must have atleast 3 directors.
7. Consent of the directors: There is no need to give the consent by the directors of a Private Company, whereas the Directors of a Public Company must have file with the Registrar consent to act as Director of the company.
8. Qualification shares: The Directors of a Private Company need not sign an undertaking to acquire the qualification shares, whereas the Directors of a Public Company are required to sign an undertaking to acquire the qualification shares of the public Company.
9. Commencement of Business: A Private Company can commence its business immediately after its incorporation, whereas a Public Company cannot start its business until a Certificate to commencement of business is issued to it.

10. Shares Warrants: A Private Company cannot issue Share Warrants against its fully paid shares, whereas a Public Company can issue Share Warrants against its fully paid up shares.

11. Further issue of shares: A Private Company need not offer the further issue of shares to its existing share holders, whereas a Public Company has to offer the further issue of shares to its existing share holders as right shares. Further issue of shares can only be offer to the general public with the approval of the existing share holders in the general meeting of the share holders only.

12. Statutory meeting: A Private Company has no obligation to call the Statutory Meeting of the member, whereas of Public Company must call its statutory Meeting and file Statutory Report with the Register of Companies.

13. Quorum: The quorum in the case of a Private Company is TWO members present personally, whereas in the case of a Public Company FIVE members must be present personally to constitute quorum. However, the Articles of Association may provide and number of members more than the required under the Act.

14. Managerial remuneration: Total managerial remuneration in the case of a Public Company cannot exceed 11% of the net profits, and in case of inadequate profits a maximum of Rs. 87,500 can be paid, whereas these restrictions do not apply on a Private Company.

15. Special privileges: A Private Company enjoys some special privileges, which are not available to a Public Company

E. Co-Operatives:

A co-operative society is a voluntary association started with the aim of service of its members. It is a form of business where individuals belonging to the same class join their hands for the promotion of their common goals. These are generally formed by the poor people or weaker section people in the society. It reflects the desire of the poor people to stand on their own legs or own merit. The philosophy of the formation of co-operative society is –all for each and each for all. It is voluntary association of persons for mutual benefit and its aims are accomplished through self help and collective effort.

Advantages:**1. Easy Formation:**

Any ten adult persons can voluntarily form themselves into an association and get it registered with the Registrar of Co-operatives. Formation of a cooperative society also does not involve long and complicated legal formalities.

2. Limited Liability:

Like company form of ownership, the liability of members is limited to the extent of their capital in the cooperative societies.

3. Perpetual Existence:

A cooperative society has a separate legal entity. Hence, the death, insolvency, retirement, lunacy, etc., of the members do not affect the perpetual existence of a cooperative society.

4. Social Service:

The basic philosophy of cooperatives is self-help and mutual help. Thus, cooperatives foster fellow feeling among their members and inculcate moral values in them for a better living.

5. Open Membership:

The membership of cooperative societies is open to all irrespective of caste, colour, creed and economic status. There is no limit on maximum members.

6. Tax Advantage:

A cooperative society is exempted from income-tax and surcharge on its earnings up to a certain limit. Besides, it is also exempted from stamp duty and registration fee.

7. State Assistance:

Government has adopted cooperatives as an effective instrument of socio-economic change. Hence, the Government offers a number of grants, loans and financial assistance to the cooperative societies – to make their working more effective.

8. Democratic Management:

The management of cooperative society is entrusted to the managing committee duly elected by the members on the basis of ‘one-member one -vote’ irrespective of the number of shares held by them. The proxy is not allowed in cooperative societies. Thus, the management in cooperatives is democratic.

Disadvantages:

In spite of its numerous advantages, the cooperative also has some disadvantages which must be seriously considered before opting for this form of business ownership. The important among the disadvantages are:

1. Lack of Secrecy:

A cooperative society has to submit its annual reports and accounts with the Registrar of Cooperative Societies. Hence, it becomes quite difficult for it to maintain secrecy of its business affairs.

2. Lack of Business Acumen:

The member of cooperative societies generally lack business acumen. When such members become the members of the Board of Directors, the affairs of the society are expectedly not conducted efficiently. These also cannot employ the professional managers because it is neither compatible with their avowed ends nor the limited resources allow for the same.

3. Lack of Interest:

The paid office-bearers of cooperative societies do not take interest in the functioning of societies due to the absence of profit motive. Business success requires sustained efforts over a period of time which, however, does not exist in many cooperatives. As a result, the cooperatives become inactive and come to a grinding halt.

4. Corruption:

In a way, lack of profit motive breeds fraud and corruption in management. This is reflected in misappropriations of funds by the officials for their personal gains.

5. Lack of Mutual Interest:

The success of a cooperative society depends upon its members' utmost trust to each other. However, all members are not found imbued with a spirit of co-operation. Absence of such spirit breeds mutual rivalries among the members. Influential members tend to dominate in the society's affairs.

PERFORMANCE APPRAISAL:

Performance appraisal is a method of evaluating the behaviour of employees in the work spot, normally including both the quantitative and qualitative aspects of job performance. Performance appraisal or merit rating rates the man and not the job as it concerned with assessing

the abilities of an individual. Performance appraisal is the systematic description of an employee's job-relevant strength and weaknesses.

-It is the process of evaluating the performance and qualification of the employees in terms of the requirement of the job for which he is employed, for purposes of administration including placement, selection of promises, providing financial rewards and other actions which require differential treatment among the members of a group as distinguished from actions affecting all members equally. - HEYEL

The basic purpose is to find out how well the employee is performing the job and establish a plan of improvement. It is a continuous process and is arranged periodically according to a definite plan. It is to how well someone is doing the assigned job.

NEED FOR PERFORMANCE APPRAISAL:

1. To decide on salary fixation, confirmation, promotion. Transfer and demotions.
2. To counsel subordinates
3. Diagnose deficiency in the employee regarding skill, knowledge, determine training and development needs.
4. To prevent grievances and in disciplinary action.

OBJECTIVES OF PERFORMANCE APPRAISAL:

1. To create and maintain a satisfactory level of performance.
2. To contribute to the employee and development through training, self and management development programmes.
3. To help superiors to have a proper understanding about their subordinates.
4. To guide the job changes with the help to continuous ranking.
5. To facilitate fair and equitable compensation based on performance.
6. To decide on layoff, retrenchment etc.

PITFALL / PROBLEMS OF PERFORMANCE APPRAISAL:

Rating biases- problems with subjective measures.

- a. **Halo Effect** Tendency of the raters to depend excessively on the rating of one trait or behavioral consideration.
- b. **Error of central Tendency-[play safe policy]** Rating all the employees around the middle point of the rating scale.

- c. **The leniency and strictness-** The leniency bias crops when some raters have or tendency to be liberal in their rating by assigning higher rates.
- d. **Strictness- Assigning consistently low rates.**
- e. **Personal prejudice-** Dislike any employee or any group may distort the rating purpose.
- f. **The Recency Effect-** The rates generally remembers the recent action of the employee at the time of rating and rate them on the basis of these recent actions, rather than on the whole activities.

Methods of Performance Appraisal:

(i) **Trait Based techniques:** It means performance evaluated by qualities it can be as such as

Job knowledge – having sufficient knowledge in job Leadership – having or acquired leadership qualities Loyalty - faithfulness(ii) **Graphical scale method:** under this method traits are broadly classified and put in a graphical form. The graphic rating scale is one of the most popular and simplest techniques for appraising performance. It is also known as linear rating scale. In this method, the printed appraisal form is used to appraise each employee.

The form lists traits (such as quality and reliability) and a range of job performance characteristics (from unsatisfactory to outstanding) for each trait. The rating is done on the basis of points on the continuum. The common practice is to follow five points scale.

The rater rates each appraisee by checking the score that best describes his or her performance for each trait all assigned values for the traits are then totaled. Figure 28-3 shows a typical graphic rating scale.

Fig. 28.3: Sample of Graphic Rating Scale Items and Format

<i>Performance Factor</i>	<i>Performance Rating</i>				
<i>Quality of work is the accuracy, skill, and completeness of work.</i>	<input type="checkbox"/> Consistently unsatisfactory	<input type="checkbox"/> Occasionally unsatisfactory	<input type="checkbox"/> Consistently satisfactory	<input type="checkbox"/> Sometimes superior	<input type="checkbox"/> Consistently superior
<i>Quantity of work is the volume of work done in a normal workday.</i>	<input type="checkbox"/> Consistently unsatisfactory	<input type="checkbox"/> Consistently unsatisfactory	<input type="checkbox"/> Consistently satisfactory	<input type="checkbox"/> Sometimes superior	<input type="checkbox"/> Consistently superior

<i>Performance Factor</i>	<i>Performance Rating</i>				
<i>Job knowledge is information pertinent to the job that an individual should have for satisfactory job performance.</i>	<input type="checkbox"/> Poorly informed about work duties	<input type="checkbox"/> Occasionally unsatisfactory	<input type="checkbox"/> Can answer most questions about the job	<input type="checkbox"/> Understands all phases of the job	<input type="checkbox"/> Has complete mastery of all phases of the job
<i>Dependability in following directions and company policies without supervision.</i>	<input type="checkbox"/> Required constant supervision	<input type="checkbox"/> Requires occasional follow-up	<input type="checkbox"/> Usually can be counted on	<input type="checkbox"/> Requires very little supervision	<input type="checkbox"/> Requires absolute minimum of supervision

This method is good for measuring various job behaviours of an employee. However, it is also subjected to rater's bias while rating employee's behaviour at job. Occurrence of ambiguity in designing the graphic scale results in bias in appraising employee's performance.

(iii) **Ranking method:** this method is very easy here rank is provided on the basis of certain traits, ranking can be outstanding, good and below average. It is the oldest and simplest formal systematic method of performance appraisal in which employee is compared with all others for the purpose of placing order of worth. The employees are ranked from the highest to the lowest or from the best to the worst. In doing this the employee who is the highest on the characteristic being measured and also the one who is lowest, are indicated. Then, the next highest and the

next lowest between next highest and lowest until all the employees to be rated have been ranked. Thus, if there are ten employees to be appraised, there will be ten ranks from 1 to 10.

Limitations:

- It does not tell that how much better or worse one is than another,
- The task of ranking individuals is difficult when a large number of employees are rated, and
- It is very difficult to compare one individual with others having varying behavioural traits. To remedy these defects, the paired comparison method of performance appraisal has been evolved. (iv) **Grading:** here categories such as good, very good and excellent are used. In this method, certain categories of worth are established in advance and carefully defined. There can be three categories established for employees: outstanding, satisfactory and unsatisfactory. There can be more than three grades. Employee performance is compared with grade definitions. The employee is, then, allocated to the grade that best describes his or her performance.
- (v) **Group appraisal:** Here a small number of persons are taken and appraisal is done.
- (vi) **MBO (Management By Objectives):** Under this method the superiors and subordinate managers of an organization come and discuss upon the employee whether to promote or not etc.

(vii) **360 degree appraisal:** Under 360 – degree appraisal, performance information such as employee's skills, abilities and behaviours, is collected –all around an employee, i.e., from his/her supervisors, subordinates, peers and even customers and clients.

In other words, in 360-degree feedback appraisal system, an employee is appraised by his supervisor, subordinates, peers, and customers with whom he interacts in the course of his job performance. All these appraisers provide information or feedback on an employee by completing survey questionnaires designed for this purpose.

All information so gathered is then compiled through the computerized system to prepare individualized reports. These reports are presented to the employees being rated. They then meet the appraiser—be it one's superior, subordinates or peers—and share the information they feel as pertinent and useful for developing a self-improvement plan.

Performance appraisal reporting or steps in effective performance

appraisal: Determining objectives – 2 types

1) To evaluate actual performance (or)
2) To determine the potential of individuals to higher jobs



Establishing standard of performance
To facilitate comparison of persons



Selection of appraiser
1) Generally the immediate superior
2) Committee of representative



Collection of data
Information relating to job and workers. Different appraisal forms for different types of jobs are designed.



Rating the employee
Rates and evaluate the worth of the employees by applying various methods. Estimating their potential for future development



Consultation
Discusses the situation with supervisor defines the performance level and incorporate the valuable suggestion



Designing the development programme
Appraiser prepares the rating report and submits it to the review

committee and inturn it is submitted to top management / executives who designs the various development programmes.



Follow up
Yearly or half yearly follow up measures

INDUSTRIAL SAFETY

An industrial accident may be defined as "an occurrence which interrupts or interferes with the orderly progress of work in an industrial establishment." According to the Factories Act of 1948, it is "an occurrence in an industrial establishment causing bodily injury to a person which makes him unfit to resume his duties in the next 48 hours." In other words, it is an unexpected event which is neither anticipated nor designed to occur. It is always sudden for a gradual process does not constitute an accident.

An industrial injury has been defined as "a personal injury to an employee which has been caused by an accident or an occupational disease, and which arises out of, or in the course of, employment, and which would entitle such an employee to compensation under the Workmen's Compensation Act, 1923."

Causes of Accidents

According to safety experts, there are three basic causes/factors that contribute to accidents in organisations. They are Chance of occurrences, unsafe conditions and unsafe acts on the part of employees.

1. Unsafe Conditions (work-related causes): These, of one sort or another, are the biggest cause of accidents. Such causes are associated with defective plants, equipment, tools materials, buildings etc. These can be termed 'technical causes.' They arise when there are improper or inadequate safety guards on machines; when machines break down; when improper personal protection equipment is installed; when mechanical or construction designs are defective and unsafe and when control devices, which have been installed to make the operation of machines safe and accident free are lacking or defective; or when there is an absence of proper maintenance and supervision of these devices. Thus, unsafe conditions include:

- ✓ Improperly guarded equipment.
- ✓ Defective equipment.
- ✓ Hazardous arrangement or procedure in and around machines or equipment.
- ✓ Unsafe storage; congestion, overloading.

- ✓ Inadequate safety devices..
- ✓ Wrong and faulty layout and bad location.
- ✓ Improper illumination — glare, insufficient light.
- ✓ Improper ventilation — insufficient air charge, impure air source.
- ✓ Poor house-keeping.
- ✓ The other work related causes of accidents are:
 - a) The job itself: Some jobs are inherently more dangerous than others, such as the job of crane man in comparison to that of the foreman. Similarly, work in some departments (like personnel) is inherently safer than the work in others (like production department).
 - b) Work schedules, accidents increase late in the day. They do not usually occur during the early hours of the work day. They are more frequent during the night shift. This is due partly to fatigue and partly to the fact that night is the period when one requires rest.
 - c) Psychological climate of the work place also affects the accident rate. Psychological, mental and emotional imbalances are at the root of several accidents.

2. Unsafe Acts: These acts may be the result of lack of knowledge or skill on the part of the employee, certain physical defects and wrong attitudes. These acts include acts like:

- ✓ Operating without authority.
- ✓ Failing to secure equipment or warning other employees of possible danger.
- ✓ Failing to use safe attire or personal protective equipment.
- ✓ Throwing materials on the floor carelessly.
- ✓ Operating or working at unsafe levels of speed, either too fast or too slow.
- ✓ Making safety devices inoperative by removing, adjusting, disconnecting them.
- ✓ Using unsafe equipment or using equipment unsafely.
- ✓ Using unsafe procedures in loading, placing, mixing, and combining.
- ✓ Taking unsafe positions, under suspended loads.
- ✓ Lifting improperly.
- ✓ Cleaning, adjusting, oiling, repairing, etc. or moving dangerous equipment.
- ✓ Distracting, teasing, abusing, startling, quarreling, day-dreaming, horseplay.

Personal Characteristics also influence accident behaviours of individuals. For example, characteristics like personality and motivation serve as a basis for certain behaviour tendencies such as tendencies to take risks and undesirable attitudes.

Statutory Provisions for Safety in India Under the Factories Act, 1948

The Factories Act, 1948, >>insists that the following preventive measures must be adopted in industrial establishments:

1. **Cleanliness:** Every factory should be kept clean and free from effluvia - from drain and privy refuse, and from dirt. It should be whitewashed at least once in 14 months or painted at least once in five years. Floors should be swept and cleaned, at least once every week, with some disinfecting fluid.
2. **Disposal of Wastes and Effluents:** Effective arrangements should be made for their disposal and/or treatment.
3. **Ventilation and Temperature:** Provision should be made for the circulation of fresh air, and temperature should be maintained by building walls and roofs of such materials as would keep it within reasonable limits. High temperature may be controlled by whitewashing, spraying and insulating the factory premises and by screening outside walls, roofs and windows.
4. **Dust and Fumes:** Effective measures should be taken to prevent, or at any rate reduce, the inhalation and accumulation of dust and fumes. Exhaust appliances should be used near the point of the origin of dust and fumes.
5. **Lighting:** Sufficient and suitable lighting, natural or artificial or both should be made available in the factory premises,
6. **Overcrowding:** No room should be overcrowded. There should be at least 500 cu. ft. of space for every worker.
7. **Drinking Water:** A sufficient quantity of cool drinking water should be made available for the employees throughout the year, particularly during the hot summer months.
8. **Latrines and Urinals:** Adequate latrines and urinals should be separately provided for men and women employees.
9. **First Aid Appliances:** There should be an adequate number of boxes containing first aid materials, qualified personnel to administer first aid, and an ambulance or at least a room where an injured employee may be given first aid.

Safety Officer: where 500 or more workers employed in factory, there should be safety officer

The role of a safety officer in an organization should be:

- ✓ To formulate safety procedure, safety policy, safety requirements and standard of the company.
- ✓ To promote schemes to guarantee observance of legal requirements.
- ✓ To act as chairman or secretary or, in any other capacity on the works safety committees.
- ✓ To promote formation of such committees, where they do not exist.
- ✓ To administer safety suggestion schemes.
- ✓ To organise safety education, training, publicity at various levels of company's operations.
- ✓ To investigate the causes of industrial injuries and the circumstances leading to accidents.
- ✓ To prepare and circulate accident statistics.
- ✓ To act in close liaison with governmental and non-governmental agencies.
- ✓ To co-ordinate the safety effort of the company in every possible way.
- ✓ To assess critically the safety performance of the organisation and if necessary, conduct safety training programmes and feedback sessions on an ongoing basis.
- ✓ To perform the job of a salesman of safety to the top executives, and as a technician, planner, organiser and stimulator of safety.

Define Accident, Non-Reportable and Reportable Accident:

Accident — Accident can be defined as an unplanned, unexpected, unforeseen event that leads injury to human body or no injury or property damage or loss of property or both. Non-Reportable Accident— When a person avails of first-aid after an accident and returns to work immediately or within 48 hrs, it is called as non-reportable accident Reportable Accident:- When a person, after an accident avails of first-aid and returns after 48 hrs, such an accident is called as Reportable Accident.

Discuss the importance of safety in the industry.

The importance of safety was realized because of following:

- (a) Every year millions of industrial accidents occur which result in death or temporary or permanent disablement. For example, industrial accident occurred in Bhopal i.e. –Bhopal gas tragedy which leads to death of hundreds of people.
- (b) Latest estimation of industrial accident cost the country at least 285 million each year. Which one is big loss to the Indian economy? This economic loss only.

(c) There is the human cost in terms of emotional sufferings to the partners, children, family and workmates of those killed at work.

What are various safety measures in an industry?

To provide safety to an industry, there are some steps which should be followed by all people working in an industry. These are the following:-

Safety Policies:

Management should make some safety policies to avoid accidents which should be followed by people working in a plant. Safety policies include:

- (i) Safety committee
- (ii) Regular inspection
- (iii) Maintenance of plant. (iv) Preventive clothing
- (v) By preventing physiological and physical harassment to workers.

(a) Safety committee: - Safety policy should include one of the major steps i.e. safety committee. This committee would include 5-6 members who individually have supervisors and workers. The work of this committee is that they would regularly make some rules and regulations for the safety, some programs to aware the workers about safety. They should educate the people about marks or signs like Fire extinguisher, No open flame, caution high voltage, caution (wear hard hat), etc.

(b) Regular Inspection:- when safety committee established then Regular Inspection of machinery, or whole plant is one of the major part of the safety. For e.g. Inspection of electric wires, motors, inspection of machines, inspection of Electronic circuits, inspection of people who did not follow the safety rules and because of them accidents occur.

(c) Maintenance of plant:- Now if you find any fault during inspection then do not ignore it and go for a maintenance of plant or machinery. Plant should be maintained in a manner such that it may provide safety and security to the workers at all costs. Obstructions should be removed from the path of workers where they are working or walking or moving etc.

PLANT LAYOUT Meaning

Plant layout is the physical arrangement of industrial facilities. It involves the allocation of space

& the arrangement of equipment in such a manner that overall operating costs are minimized.

Objectives of plant layout

1. Economies in materials facilitate manufacturing process & handling of semi-finished & finished goods.
2. Proper & efficient utilization of available floor space.
3. To avoid congestion & bottlenecks.
4. Provision of better supervision & control of operations.
5. Careful planning to avoid frequent changes in layout which may result in undue increase in cost of production.
6. To provide adequate safety to the workers from accidents.
7. To meet the quality & capacity requirements in the most economical manner.
8. Provision of medical facilities & cafeteria at suitable & convenient places.
9. To provide efficient material handling system.
10. To suggest the improvements in production process & work methods.

Principles of plant layout

1. Principle of integration (of 5M's)
2. Principle of minimum distance
3. Principle of cubic space utilization (both horizontal & vertical space).
4. Principle of flow(must be forward no backtracking)
5. Principle of maximum flexibility
6. Principle of safety, security & satisfaction
7. Principle of minimum handling.

Factors affecting plant layout

1. **Nature of product-** e.g. some products need air-conditioned plants.
2. **Size of output-**
 - ✓ For bulk-product/line layout
 - ✓ For small-functional layout
3. **Nature of manufacturing system-**

- ✓ For intermittent-functional layout
 - ✓ For continuous-product/line layout
4. **Localization of plant-** e.g. there will be different transportation arrangement if site is located near railway line.
 5. **Machines or equipment-** e.g. heavy machines need stationary layout
 6. Climatic conditions, need of light, temperature also affect design of layout.

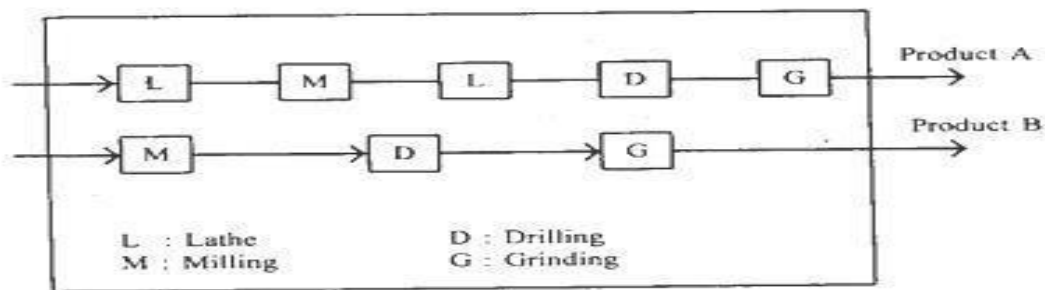
Types of plant layout

- ✓ Product layout
- ✓ Process layout
- ✓ Fixed Position/ Stationary layout
- ✓ Cellular or group layout

1. Product layout

A product layout groups different workstations together according to the products they work on. Workstations in a product layout can quickly transfer small batches of semi-finished goods directly to the next station in a production line. Product layouts can be ideal for smaller manufacturing businesses with lower volume than their large corporate competitors.

Layout that uses standardized processing operations to achieve smooth, rapid, high-volume flow. Here machines are arranged according to the needs of product & in the same sequence as the operations are necessary for manufacture. E.g. ‘back office’ of services such as banks and insurance companies.



Advantages of Product Layout

- ✓ High rate of output
- ✓ Low unit cost
- ✓ Labor specialization
- ✓ Low material handling cost

- ✓ High utilization of labor and equipment
- ✓ Established routing and scheduling
- ✓ Short processing time

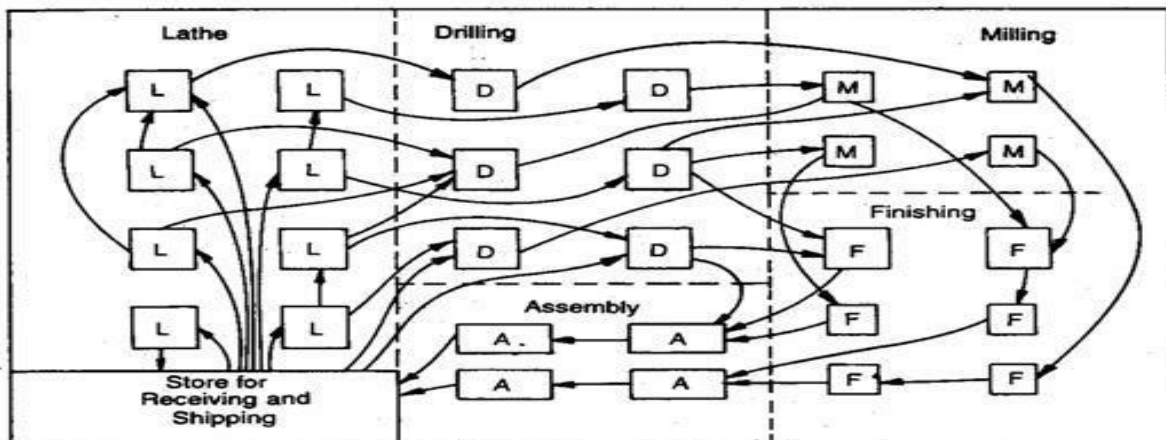
Disadvantages of Product Layout

- ✓ Creates dull, repetitive jobs
- ✓ Poorly skilled workers may not maintain equipment or quality of output
- ✓ Fairly inflexible to changes in volume
- ✓ Highly susceptible to shutdowns
- ✓ Needs preventive maintenance
- ✓ Require large capital investment

2. Process layout

A process layout groups workstations together according to the activities being performed, regardless of which products each workstation is working on. Workstations produce higher volumes of output at a time before sending semi-finished goods in bulk to the next area, which may be located as close as the other end of a building or as far as another facility on the other side of the globe.

Layout that can handle varied processing requirements. Here all machines performing similar type of operations are grouped together at one location in the process layout. Thus here facilities are grouped together acc. To their functions. E.g. all drilling machines are located at one place known as drilling section.



Advantages of Process Layouts

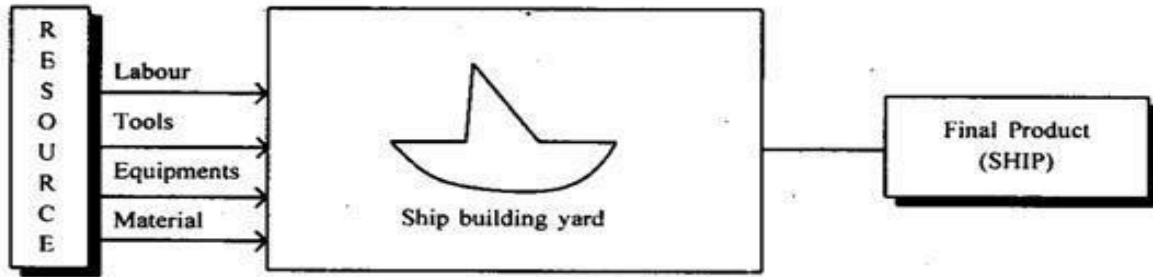
- ✓ Can handle a variety of processing requirements
- ✓ Machines breakdown doesn't result in shutdown.
- ✓ Equipment used is less costly
- ✓ Wide flexibility in production facilities.
- ✓ Each production unit of system works independently.
- ✓ High utilization of facilities
- ✓ Variety makes the job interesting.

Disadvantages of Process Layouts

- ✓ In-process inventory costs can be high
- ✓ Challenging routing and scheduling
- ✓ Equipment utilization rates are low
- ✓ Material handling is slow and inefficient & is more.
- ✓ More space is required
- ✓ Longer processing time
- ✓ Back tracking may occur.

3. Stationary layout:

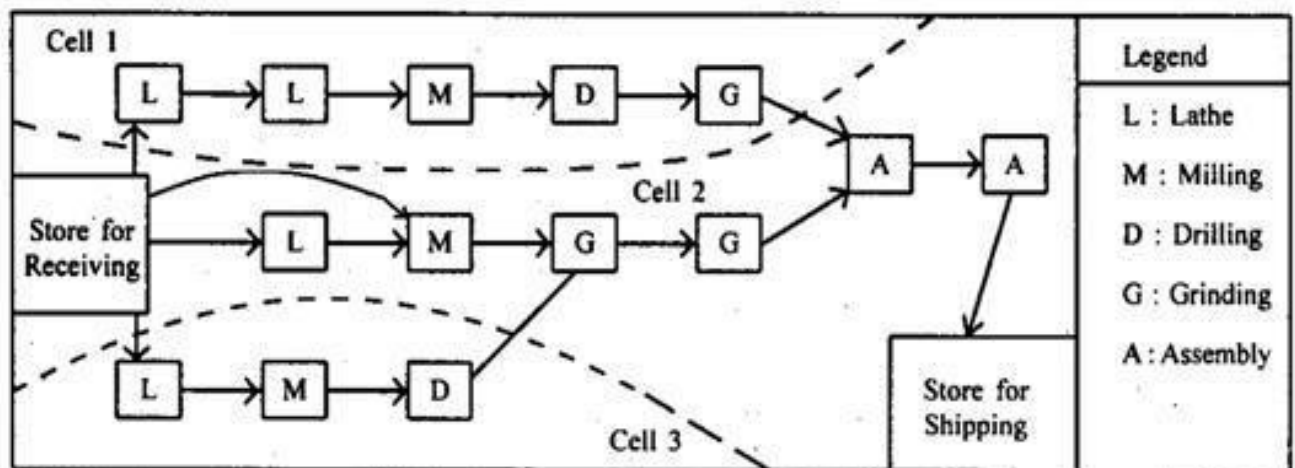
Stationary Layout in which the product or project remains stationary, and workers, materials and equipment are moved as needed. Eg. Construction of DAMS. The product, because of its size and/or weight, remains in one location and processes are brought to it.



4. Cellular or group layout

Cellular layout is based on the group technology (GT) principle. Therefore, it is also called as group layout. This layout is suitable for a manufacturing environment in which large variety of products are needed in small volumes (or batches). The group technology principle suggests that parts, which are similar in design or manufacturing operations, are grouped into one family, called part-family. For each part-family a dedicated Cluster of machines (called machine cell) are identified. Generally, all the processing requirements of a particular part-family are completed in its corresponding machine cell. In other words, the intercell transfer of part should ideally be zero."

The cellular layout is thus a combination of process and product layout. Therefore, it possesses the features of both. Cellular manufacturing system (CMS) involves decomposition of manufacturing system into subsystems of similar parts/machines. CMS allows batch production to give economical advantages similar to those of mass production with additional advantages of flexibility, normally associated with job shop production systems



MAINTENANCE

‘Maintenance’ as – the combination of all technical and administrative actions, including supervision actions, intended to retain an item in, or restore it to, a state in which it can perform a required function.

Need for maintenance:

The main purpose of regular maintenance is to ensure that all equipment required for production is operating at 100% efficiency at all times. Through short daily inspections, cleaning, lubricating, and making minor adjustments, minor problems can be detected and corrected before they become a major problem that can shut down a production line. A good maintenance program requires company-wide participation and support by everyone ranging from the top executive to the shop floor personnel.

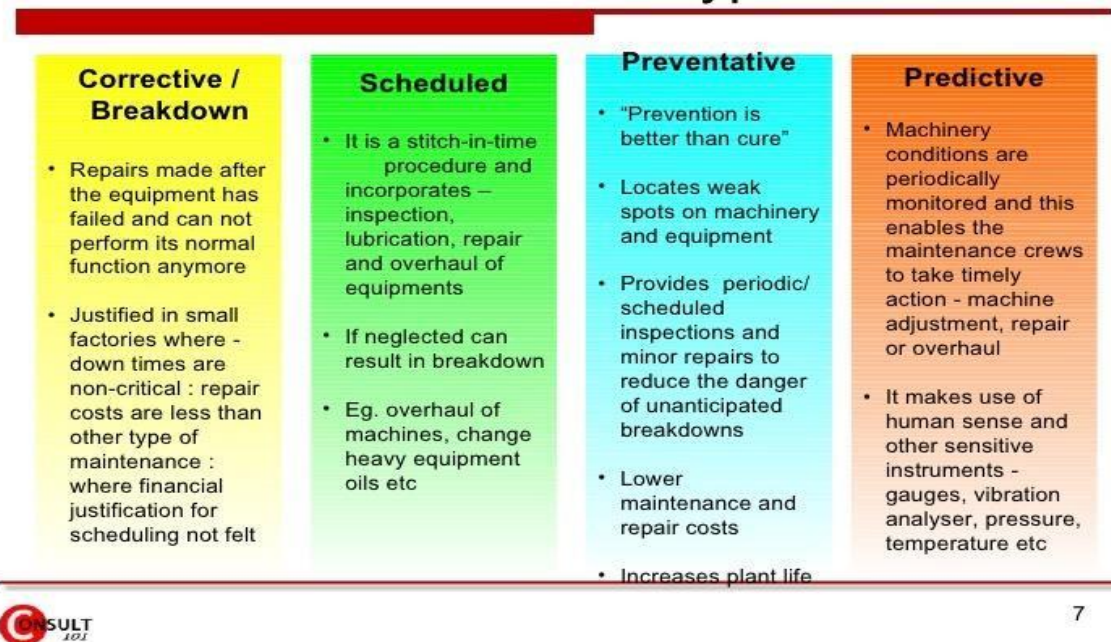
The prime aim of maintenance is to preserve a building in its initial stage, as far as practicable, so that it effectively serves its purpose. Some of the main purposes of maintaining buildings are:

1. Retaining value of investment
2. Maintaining the building in a condition in which it continues to fulfill its function, and
3. Presenting a good appearance.

Types of Maintenance

- ✓ Breakdown Maintenance
- ✓ Scheduled Maintenance
- ✓ Preventive Maintenance
- ✓ Predictive Maintenance

Maintenance Types



1. Breakdown maintenance:

The maintenance carried out after a failure has occurred and intended to restore an item to a state in which it can perform its required function is called as breakdown maintenance. Breakdown maintenance is maintenance performed on equipment that has broken down and is unusable. It may be either planned or it can be unplanned. Planned maintenance is –The maintenance organized and carried out with forethought, control and the use of records to a predetermined plan. Unplanned maintenance is carried out to no predetermined plan.

2. Scheduled maintenance:

Scheduled maintenance is the one where the preventive maintenance carried out to a predetermined interval of time, number of operations, mileage, etc.

Scheduled maintenance is planned component repair or replacement, often triggered by preventive maintenance inspections, pre-trip and post-trip inspections, regular oil changes and grease jobs, etc., all of which are also scheduled maintenance activities whereas the unscheduled maintenance is work that results from breakdowns, unexpected failures, often triggering road calls and usually causing expensive downtime of labor crews.

3. Preventive Maintenance:

Preventive maintenance can be defined as the Actions performed on a time- or machine-run-based schedule that detect, preclude, or mitigate degradation of a component or system with the aim of sustaining or extending its useful life through controlling degradation to an acceptable level.

The maintenance carried at predetermined intervals or corresponding to prescribed criteria and intended to reduce the probability of failure or the performance degradation of an item is termed as preventive maintenance.

4. Predictive Maintenance:

Predictive maintenance can be defined as follows: Measurements that detect the onset of degradation mechanism, thereby allowing causal stressors to be eliminated or controlled prior to any significant deterioration in the component physical state. Results indicate current and future functional capability.