

Chapter 2

Principles of Management

Chapter 2 Principles of Management

VERY SHORT ANSWER TYPE QUESTIONS (1 MARK)

1. How are management principles derived?

Ans. Management principles are derived through observation and analysis of events.

2. Give anyone difference between Principle and Technique.

Ans. Principles are guidelines to take decision whereas techniques are methods to take action.

3. What is meant by ‘Universality of management principles’?

OR

Why is it said that management principles are universal?

Ans. This it means that they are applicable to all kinds of organizations.

4. The principles of management aren’t rigid and can be modified when the situation demands. Which nature of principles is being discussed here?

Ans. Flexibility.

5. Define scientific management.

Ans. Application of a scientific approach to managerial decision making.

6. List any two principle of ‘Scientific Management’ formulated by Taylor for managing an organization scientifically.

Ans. (i) Science, not Rule of Thumb. (ii) Harmony, not Discord.

7. Factory owners or managers relied on personal judgment in attending to the problems they confronted in the course of managing their work. Which principle of Taylor is it referring to ?

Ans. ‘Rule of thumb’

8. What do you mean by Mental Revolution?

Ans. Mental Revolution means revolutionary change in the attitude of both workers and managers from competition to cooperation.

Chapter 2 Principles of Management

9. Principle of cooperation, not individualism, is an extension of which principle given by Fayol?

Ans. Principle of Harmony, not discord.

10. What is the aim of Method study?

Ans. Aim is to find one best method of doing the job.

11. What is the aim of doing motion study?

Ans. The aim of this study is to eliminate unnecessary movements so as to ensure timely completion of work.

12. What is the purpose of time study?

Ans. To estimate/ determine a fair day's work.

13. Name the techniques of Taylor which is the strongest motivator for a worker to reach standard performance.

Ans. Differential Piece Wage system.

14. The directors of XYZ limited, an organization manufacturing computer, want to double the sales and have given the responsibility to the sales manager. The sales manager has no authority either to increase sales expense or appoint new salesmen. Hence, he could not achieve this target. Identify the principle violated in this situation.

Ans. Principle of Authority and Responsibility.

15. A company manufacturing motorcycles and cars should have separate divisions for both, headed by separate divisional managers, separate plans and resources. Identify the principle with the help of this example.

Ans. Unity of Direction.

Chapter 2 Principles of Management

SHORT ANSWER TYPE QUESTIONS (3 OR 4 MARKS)

1. What do you mean by management principles?

Ans. Principles are statements of fundamental truths about some phenomena and serve as a guide for thoughts and actions. They establish cause and effect relationship. Management Principles are the fundamental statements of truth that provide guidelines to the managers for decision making and actions. These enable the managers to manage the enterprises in “3E way” viz ‘economically’, ‘effectively’ and ‘efficiently’. These act as guide for managers and sharpen their skills and competence. For example, principle of division of labor increases the efficiency of workers which ultimately leads to economy and effectiveness in the organization.

2. How are management principles derived?

OR

“Management principles are evolutionary.” Explain.

OR

“Derivation of management principles may be said to be a matter of science.” Explain.

Ans. Management principles are not made in heavens; they have emerged gradually, through an evolutionary process of combining deep observations and experimental studies.

(i) Observation method

Under this method, practical events are observed and analyzed by managerial researchers to derive management principles. For example, it was observed that by dividing the work into different units, efficiency of employees improved. As a result, it led to formulation of principle of ‘division of labor’.

(ii) Experimental method

Under this method, experiments are conducted so that management principles can be derived and their validity can be tested. For example, two units, one unit involving one superior and one subordinate and other unit involving two superiors and one subordinate, were taken. It was found that unit having one superior and one subordinate performed better. As a result, it led to formation of principle of “unity of command.” From the above it can be concluded that observations and

Chapter 2 Principles of Management

experiments result in the formulation of management principles which therefore are evolutionary. Hence, derivation of management principles can be said to be a matter of Science. It is worth mentioning here that even though derivation of management principles is a matter of science; their application remains a matter of art. The success of managers depends upon how skillfully they put these principles into practice.

3. Give three points reflecting the nature of management principles.

Ans. Management principles are (any three):

- (i) Universal in application.
- (ii) General guidelines.
- (iii) Flexible and can be applied differently under different conditions.
- (iv) Formed by practice and experimentation.
- (v) Establish cause and effect relationships.

4. “Principles of management achieve results economically.” Explain?

Ans. Management principles help in setting realistic objectives for the business because the objectives are set with the participation of employees. Hence, the employees work to their full potential and their commitment level increases because objectives of organization become their own objectives. For example, the principle of maximum output rather than restricted one ensures more output. More output lowers cost per unit and hence profit per unit increases.

5. Define scientific management and name any three of its principles.

Ans. According to Taylor, “Scientific management means knowing exactly what you want your men to do and seeing that they do it in the best and cheapest way”. Three principles of scientific management are as follows:

- (i) Science, not rule of thumb
- (ii) Harmony, not discord.
- (iii) Cooperation, not individualism.

6. Explain the objectives of standardization.

Ans. Standardization is done for the following reasons:

- (i) To ensure that a given product range has fixed types, sizes, characteristics etc.
- (ii) To bring about interchangeability, for manufactured parts, output,

Chapter 2 Principles of Management

developments etc. among various branches.

(iii) To set uniform standards of performance for men, machines etc.

7. Which technique of Taylor suggests that each worker should be supervised by specialists? Give the designations of any four specialists suggested by him.

Ans. The technique of functional foremanship suggests that each worker should be supervised by specialists. These specialists' designations are follow.

(i) Instruction Card Clerk

(ii) Route Clerk

(iii) Time and Cost Clerk

(iv) Disciplinarian

8. 'Discipline is double-edged tool' Comment.

Ans. Discipline is a double-edged tool. It is expected to strike a balance between forcing the discipline on one hand and motivating employees on the other.

Personnel entrusted with enforcing it are expected to be competent and capable of achieving this balance. Employees must honor the commitment made by them and management must meet its promises to increase wages declaration of bonus etc. To achieve proper discipline, skilled superiors at all levels, clear and fair agreements and judicious application of penalties etc. are required.

9. Explain the principle of unity of direction.

Ans. This principle suggests that in an organization there should be one head and one plan for a group of activities having the same objective. This helps in bringing unity of action and coordination in an organization. If a company is manufacturing two different products then it should have two separate divisions or departments for both the products. Each division or department should have their separate in-charge, plans and execution resources etc.

Chapter 2 Principles of Management

10. An organization follows the principles of management. What are the adverse effects of each of the following principles of management on the organization?

(i) Unity of Command

(ii) Order

(iii) Stability of tenure of personnel

Ans. Adverse effects of said principles are:

(i) Unity of Command: If this principle is followed, work gets delayed which results in wastage of time and cost.

(ii) Order: It creates boredom among the employees due to rigidity provided by this principle.

(iii) Stability of personnel: If employees are not rotated on different jobs frequently, they can specialize only in a small part of the whole process of production and thus can never become versatile.

11. Explain how principles of management

i) Help the managers in taking scientific decisions

ii) Provide the managers with useful insights into real world situations

Ans. Explanation of relevant sub-headings from significance of principles of management.

LONG ANSWER TYPE QUESTIONS (5 OR 6 MARKS)

1. Explain the nature of management principles.

Ans. Nature of management principles can be described as follows:

(i) Universal Applicability: The principles of management are applicable to all types of organizations irrespective of their size and nature.

(ii) General Guidelines: They are only guidelines for action and don't provide direct or readymade solution for a managerial problem.

(iii) Formed by practice and experimentation: The principles of management have been developed through experimentation as well as experience and wisdom of managers.

(iv) Flexible: They are flexible i.e. they can be modified by the managers according to a given situation.

(v) Mainly behavioral: They are mainly behavioral in nature since they are

Chapter 2 Principles of Management

devised to influence human behavior.

(vi) Cause and effect relationship: The principles of management establish relationship between cause and effect. They guide us as to what would be the effect if a particular principle were to be applied in a given situation.

(vii) Contingent: The use of principles of management is contingent or dependent upon the prevailing conditions.

2) Explain the importance of management principles.

Ans. The importance of management principles can be understood by considering the

following points:

(i) Provide useful insight to manage: Principles of management help in increasing managerial efficiency by adding to their knowledge and ability to understand the various situations more objectively.

(ii) Optimum Utilization of Resources and effective administration:

Management principles help in organizing various activities in such a way that results in elimination of unwanted activities and consequent wastage. Management principles help in managing organizations effectively. For example, Unity of Command helps to avoid confusion and conflicts. Unity of Direction ensures unity of actions to facilitate coordination.

(iii) Scientific decisions: They help the managers in taking the decisions based on the objective assessment of a situation. Thus decisions taken are logical and free from any bias and prejudice.

(iv) Meeting changing environment requirements: Though the principles are only guidelines for action yet they can be modified according to the need of changing situations. Thus principles of management help in meeting changing requirements of the environment.

(v) Fulfilling social responsibilities: Principles of management have been devised in such a way that they help in fulfilling social responsibilities.

(vi) Management training, education and research: Principles of management are the fulcrum of management theory so that they are used as a basis for management training, education and research.

Chapter 2 Principles of Management

3. Taylor’s principles of scientific management and Fayol’s principles of management are mutually complementary.” Do you agree with this view? Give any four reasons in support of your answer.

Ans. Yes, Taylor’s principles of scientific management and Fayol’s principles of management are mutually complementary because of the following reasons:

Basis	Taylor	Fayol
1. Personality	Taylor was a scientist	Fayol was a practitioner
2. Perspective	Taylor’s principles & techniques are based on bottom upward approach	Fayol’s principles are based on top downward approach
3. Scope and Applicability	Taylor’s principles & techniques are relevant mainly with respect to production activities	Fayol’s principles have wider relevance in all functional areas
4. Focus	Taylor’s’ principles & techniques are focused on workers’ efficiency and production.	Fayol’s principles are focused on improving overall management efficiency.
5.Modifications	Taylor’s techniques are more specific in nature and should be applied without any modification and only in specific conditions	Fayol’s principles are more general in nature & can be applied in most of the organizations with some modifications.
6. Expression	Taylor expressed his thoughts and views under the theory of scientific management	Fayol expressed his ideas as the general theory of management.

Basis of Difference	Principle of Management	Principles of Science
1. Nature	They are flexible	They are rigid.

Chapter 2 Principles of Management

QUESTIONS WITH DIFFERENT DIFFICULTY LEVELS

1. 'Principles of Management are different from those used in pure science'.

Write any one difference. (1)

Ans. The principle of management are not universal in their Application while those in pure science are universal

2. Which principle does functional foreman ship violate? (1)

Ans. Unity of command

3. Give any one effect of principle of division of work? (1)

Ans. Specialization, speed, accuracy.

4. A sales person is asked to finalize a deal with customer. The marketing manager allows him to give a discount of up to 10% but the Finance Manager allows him to give discount of upto 25%. Which principle is violated here? (1)

Ans. Unity of Command.

5. "Workers should be encouraged to develop and carry out their plans for development." Identify the principle of management formulated by Fayol. (1)

Ans. Principle of Initiative

6. State any three reasons as to why proper understanding of management principles is necessary. (3 or 4)

Ans. Proper understanding of management principles is necessary because of the following reasons (any three):

- (a) They provide managers with useful insight into reality.
- (b) They help in optimal utilization of resources and effective administration.
- (c) They help in meeting environment requirements.
- (d) They are used as basis for management training, education and research.

7. How do management principles ensure optimum utilization of resources and effective administration? (3 or 4)

Ans. In every organization, resources such as men, machine, material and money play a vital role. Management principles are designed in such a way that maximum benefits from these resources can be achieved minimum resources wastage. Along

Chapter 2 Principles of Management

with this, the principles of management also help in establishing effective administration by limiting the boundary of managerial discretion that their decisions may be free from personal biases. For example, while deciding the annual budget for different departments, a manager is required to follow the principle of contribution to organizational objectives and not personal preferences.

8. Explain briefly the technique of fatigue study?(3or4)

Ans. Fatigue study determines the amount and frequency of rest intervals in completing a task. Workers cannot work at a stretch. After putting in work for a certain periods of time, they reel tired which affects their performance. If they are allowed rest intervals, they will regain their stamina and will resume their work with greater efficiency.

9. Give positive effects of the principle of ‘discipline’. (3or4)

Ans. Positive effects of the principle of ‘discipline’ are as under:

- i) Improves efficiency of the employees.
- ii) Systematic work in the organization.
- iii) Ensuring that penalties are imposed judicially.

10. Explain the Principle of centralization and decentralization.

Ans. Centralization means concentration of authority in the hands of few people at the top, whereas decentralization means appropriate distribution of power at every level of management. According to Fayol, company must be properly balanced i.e. it should neither be completely centralized nor d e c e n t r a l i z e d . There must be some element of both depending upon the profile of the organization. The panchayat system in our country is a very good example of decentralization at the national level.

11. Ms. Ritu and Mr. Mohit are Data Entry Operators in a company having same educational qualifications. Ritu is getting Rs. 5,000 per month and Mohit Rs. 6,000 per month as salary for the same working hours. Which principle of management is violated in the case? Name and explain the principle.

Ans. The principle of ‘equity’ is violated in this case. According to this principle, employees should be given kind, fair and just treatment and there should not be

Chapter 2 Principles of Management

any discrimination based on caste, creed, color, sex etc. Apparently, Ritu is getting less in view of bring a female which is against this principle.

12. Explain the technique ‘Functional Foremanship’. (5 or 6)

Ans. Functional foremanship is the extension of the principle of specialization. This technique emphasizes on the separation of planning from execution. To facilitate it, Taylor suggested setting up of “planning in charge” and “production in charge”.

FUNCTIONAL FOREMANSHIP

Planning Incharge: The main function of “planning in charge” is to plan all aspects of a job to be performed. It consists of four positions:

- (i) **Route clerk:** He determines the sequence to perform various mechanical and manual operations.
- (ii) **Instruction card clerk:** He issues instructions to the workers to be followed by them.
- (iii) **Time and cost clerk:** He is concerned with the framing of time schedule on the basis of determined route. Also, he keeps the record of the cost of operations.
- (iv) **Disciplinarian:** He is concerned with the coordination in each job from planning to successful execution. He enforces rules and regulations and maintains discipline.

Production Incharge: It consists of following four specialists who are concerned with the execution of plans.

- (i) **Speed Boss:** He checks whether work is progressing as per schedule. He ensures timely and accurate completion of jobs.
- (ii) **Gang Boss:** He arranges machines, materials, tools, and equipments properly so that workers can proceed with their work.
- (iii) **Repair Boss:** He ensures that all machines, tools, equipments are in perfect working order.

Inspector: He ensures that the work is done as per the standards of quality set by planning department.

Chapter 2 Principles of Management

13. Name and explain that principle of Fayol which suggests that communication from top to bottom should follow the official lines of command.(5 or 6)

OR

Explain the ‘Principle of Scalar Chain’ with an example.

Ans. In an organization, the formal lines of authority, from highest to lowest level of all superiors and subordinates, are known as scalar chain. The principle of scalar chain suggests that there should be a clear line of authority from top to bottom, linking superiors and subordinates at all levels. The scalar chain serves as a chain of command as well as communication. In normal circumstances, the formal communication is required to be made by following this chain.

Scalar Chain and Gang Plank

Example: The above figure shows the scalar chain linking managers at lower levels with the top management. If D has to communicate with G, The message should ordinarily move up through C and B to A, and then down from A to E, F and G.

Above mentioned chain has following disadvantages:

- (i) It causes delay in reaching communication to the required level.
- (iii) Creates the possibility of distortion of information flow as various levels are involved.

To avoid delays and to remove hurdles in the exchange of information, concept of Gang Plank has been suggested by Fayol, shown by the dotted line joining D and G.

Exercises

Short Answer Type:

1. How is the Principle of ‘Unity of Command’ useful to management? Explain briefly.

Ans: Principle of Unity of Command implies that each and every subordinate should have one and only one boss. Orders and instructions should come from only one head. This helps the working of any organisation in the following manner

- (i) Authority responsibility relationship is clearly defined.

Chapter 2 Principles of Management

- (ii) Subordinates are known for whom they are accountable.
- (iii) Discipline and order is maintained.

2. Define scientific management. State any three of its principles.

Ans: Scientific management can be defined as knowing exactly what you want from men to do and seeing that they do it in the best and cheapest way.

Scientific management aims at choosing the best. Method to get the maximum output from the workers the principles of scientific management are mainly applicable to the shop-floor level.

Three principles of scientific management are as follows

(i) **Science, Not Rule of Thumb** When different managers use their own different methods to get the work done it is rule of thumb. Taylor believed that there was only one best method to maximise efficiency. Taylor advised that every organisation should compare the results of different methods, test them again and again and finally select one best method of getting the work done.

(ii) **Harmony, Not Discord** Managers are an extension of the management and serve as a link between workers and the owners. Workers have to take instructions from the managers and managers have to get the work done through the workers. Oftentimes the relation between them is spoilt which is very harmful for everyone-workers, managers and owners. This class conflict should be replaced by harmony between the two. Both should change their thinking towards each other. Both should give importance to each other. This is known as mental revolution.

(iii) **Co-operation, Not Individualism** There should be complete co-operation between the labour and the management instead of individualism. This principle is an extension of the principle of 'Harmony not discord.' The management and the workers should not compete with each other rather co-operate with each other. Management should consider all good suggestions made by the employees which can help in cost reduction. At the same time, workers should never think of going or stickes in order to get their unreasonable demands fulfilled.

Chapter 2 Principles of Management

3. If an organisation does not provide the right place for physical and human resources in an organisation, which principle is violated? What are the consequences of it?

Ans: The principle of order is violated if an organisation does not provide the right place for physical and human resources.

If this principle is violated then

- (i) Lots of time will be wasted in locating the different resources.
- (ii) This will lead to delayed decisions.
- (iii) Wastage of energy which will lead to in efficiency and delay in production.
- (iv) Causes hindrance in the activities of business.

4. Explain any four points regarding significance of Principles of management.

Ans: Significance of principles of management

- (i) **Providing Managers with Useful Insights into Reality** When managers follow principles it adds to their knowledge, ability and understanding of managerial situations and circumstances. This improves managerial efficiency e.g., when managers use principle of delegation then they get more time to concentrate on critical areas of working.
- (ii) **Scientific Decision Making** management principles help in thoughtful decision making. They emphasise on logic rather than blind faith. Here, decisions are based on the objective assessment of the situation.
- (iii) **Optimum Utilisation of Resources and Effective Administration** Principles help the managers to conceptualise the net effect of their decision rather than going for trial and error method resulting in saved time, efforts and energy thereby increased productivity.
- (iv) **Management Training, Education and Research** Principles of management are the base for management theory. As such they are used as a basis for management training, education and research. These principles provide basic groundwork for the development of management as a subject. Professional courses like BBA, MBA also teaches these principles as part of their curriculum.

Chapter 2 Principles of Management

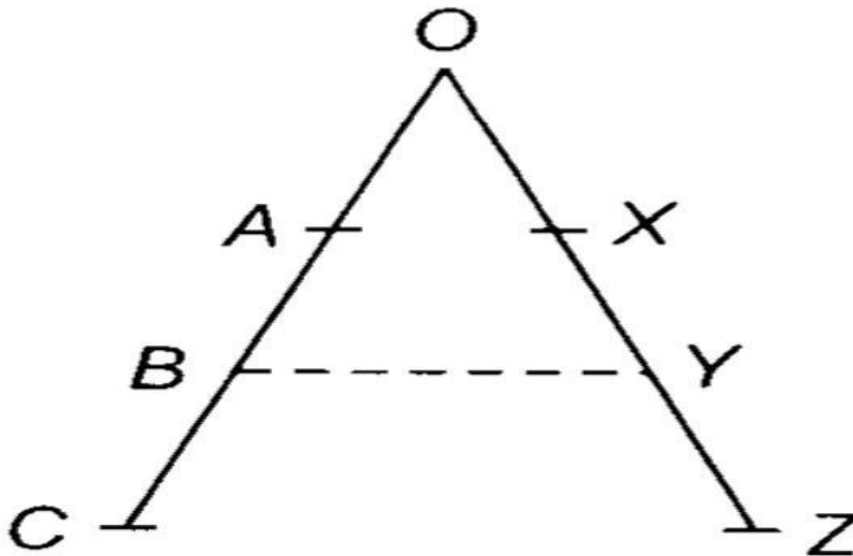
5. Explain the principle of 'Scalar Chain' and gang plank.

Ans: Principle of Scalar Chain and Gang plank

The formal lines of authority from highest to lowest ranks are known as scalar chain. According to Fayol,

“Organisation should have a chain of authority and communication that runs from top to bottom and should be followed by managers and subordinates.”

In the diagram, O is heading 2 teams where A and X are at the same level, B and Y are at the same level and C and Z are at the same level. The line of communication is clearly defined A to B to C and X to Y to Z. Authority responsibility relationship is also very clear. But C and Z cannot directly contact each other. This some times may take lot of time during an emergency to communicate as per the prescribed flow to avoid this problem a system known as 'Gang Plank' was introduced where in C or Z could contact each other and same way B and Y could contact each other.



Chapter 2 Principles of Management

Long Answer Questions

1. Explain the principles of scientific management given by Taylor.

Ans: Principles of scientific management are given by FW Taylor

(i) **Science, Not Rule of Thumb** When different managers use their own different methods to get the work done it is rule of thumb. Taylor believed that there was only one best method to maximise efficiency. Taylor advised that every organisation should compare the results of different methods, test them again and again and finally select one best method of getting the work done.

(ii) **Harmony, Not Discord** Managers are an extension of the management and serve as a link between workers and the owners. Workers have to take the instructions from the managers and managers have to get the work done through the workers. Sometime the relation between them is spoilt, which is very harmful for everyone-workers, managers and owners. This class conflict should be replaced by harmony between the two. Both should change their thinking towards each other. This is known as mental revolution.

(iii) **Co-operation, Not Individualism** There should be complete co-operation between the labour and the management instead of individualism. This principle is an extension of principle of harmony, not discord. The management and the workers should not compete with each other rather co-operate with each other. Management should consider all good suggestions made by the employees which can help in cost reduction. At the same time workers should never think of going on strikes in order to get their unreasonable demands fulfilled.

(iv) **Development of Each and Every person to His or her Greatest Efficiency and Prosperity**

Scientific management also stood for worker development. Taylor believed that workers should be aware of the 'best method'. On the other hand, all organisations should select employee carefully in order to get maximum efficiency. When the duties are allotted, perfect match should be made between the requirements of the job and the capabilities of the worker. Training should be provided to improve the skills further. In this way, efficiency will go higher resulting in prosperity for both workers and company.

Chapter 2 Principles of Management

2. Explain the following principles of management given by Fayol with examples.

- (a) Unity of direction
- (b) Equity
- (c) Espirit de Corps
- (d) Order
- (e) Centralisation and decentralisation
- (f) Initiative

Ans: Fayol introduced general principles of management. Some of them have been explained below

(a) Unity of Direction

All the units of an organisation should be moving towards the same objective. Each group of activities having the same objective must have one head and one plan. Each group should have its own incharge and on no account the working of two divisions neither be overlapped.

(b) Equity

This principle emphasise kindliness and justice in the behaviour of managers towards workers. This will ensure loyalty and devotion. Lazy personnel should be dealt sternly and strictly. There should be no discrimination against anyone on account of gender, religion, caste, language or nationality etc. All decisions should be merit based.

(c) Espirit de Corps

This principle emphasises on building harmony and team spirit among employees. In a large organisation due to a large work force teamwork is very important. Teamwork leads to better co-ordination while working. The head of each team should give credit of good result to the whole team rather than confining it to his ownself.

(d) Order

A place for everything and everyone in his/her place. Basically it means orderlinss. If there is a fixed place for different things in a factory and they remain in their places then no time is wasted in locating them. Same way if every personnel is allocated an area to operate from then his co-workers, head or subordinates, anyone can contact him easily.

Chapter 2 Principles of Management

(e) **Centralisation and Decentralisation** Concentration of authority in a few hands is centralisation and its dispersal among more number of people is decentralisation. Fayol believed that an organisation should not work with anyone of them in isolation. A combination of both is important simple, easy and work of routine type should be decentralised and critical important type of work should be centralised.

(f) **Initiative** Initiative means taking the first step with self-motivation workers should be encouraged to develop and carry out their plans for improvements according to Fayol. Initiatives should be encouraged. A good company should invite suggestions from employees which can result in substantial cost/time reduction. Rewards can be given to fruitful suggestions.

3. Explain the technique of ‘Functional Foremanship’ and the concept of ‘Mental Revolution’ as enunciated by Taylor.

Ans: Functional Foremanship Taylor advocated separation of planning and execution functions. This concept was extended to the lowest level of the shop floor. It was known as functional foreman ship.

Basis	H Fayol	FW Taylor
Perspective	Top level management	Lower level management
Unity of command	Followed	Not followed (functional foremanship)
Applicability	Universal applicable	Application as per the specialised situations
Basis of formation	Personal experience	Observation experimentation
Focus	To improve overall working	Increase productivity
Personality	Practitioner	Scientist
Expression	General theory of administration	Scientific management

Under the factory manager, there is a planning incharge and a production incharge.

Under the planning incharge, the work goes as follows

- (i) **Instruction Card Clerk** Draft instructions for the workers.
- (ii) **Route Clerk** Specify the route of production.
- (iii) **Time and Cost Clerk** Prepare time and cost sheet.
- (iv) **Disciplinarian** Ensure discipline.

Chapter 2 Principles of Management

Under the production incharge, the work goes as follows

- (i) **Speed Boss** Timely and accurate completion of work.
- (ii) **Gang Boss** Keeping tools and machines ready for operation by workers.
- (iii) **Repairs Boss** Ensure proper working conditions of machines.
- (iv) **Inspector** Check the quality of work.

Mental Revolution

In a factory, the managers served as a link between the owners and the workers.

The managers have to get the work done from the workers which created sometimes problem between the two. Taylor emphasized that there should be harmony between the management and workers. Both should realise that each one is important. For this both had to change their thoughts for each other, This is known as 'Mental Revolution'. Management should share the gains of the company with the workers and at the same time workers should work hard and be ready to accept any change made for the betterment of the organisation.

4. Discuss the following techniques of scientific work study

- (a) Time study
- (b) Motion study
- (c) Fatigue study
- (d) Method study
- (e) Simplification and standardisation of work

Ans: Some of the techniques of scientific work study are

(a) Time Study It determines the standard time taken to perform a well-defined job. The standard time is fixed for the whole of the task by taking several readings. The method of time study will depend upon volume and frequency of the task, the cycle time of the operation and time measurement costs. There are three objectives achieved through time study.

- (i) Determine the number of workers.
- (ii) Frame suitable incentive schemes.
- (iii) Determines labour costs.

e.g., if standard time taken to do a piece of work is 20 minutes then one work can be done 3 times in an hour and total 21 times (3×7 hours per day) the work can be done on a single day.

Chapter 2 Principles of Management

(b) **Motion Study** Motion study refers to the study of movements like lifting, putting objects, sitting and changing positions. On close examination of body motions, e.g., it is possible to find out three types motions

- (i) Motions which are productive.
- (ii) Motions which are incidental.
- (iii) Motions which are unproductive.

Out of the above, three workers were motivated to eliminate the third type completely and reduce the second one to the minimum. This help in increasing productivity.

(c) **Fatigue Study** Fatigue study seeks to determine the amount and frequency of rest intervals in completing a task. A person is bound to feel tired physically and mentally if he does not take rest while working. The next intervals will help one to regain stamina and work again with the same efficiency for e.g., in an organisation working hours are 9 to 5. There is a lunch break of an hour for the workers to take rest similarly in a school there is a break for the students and teachers after 4 periods of continuous learning.

(d) **Method Study** The objective of method study is to find out one best way of doing the job. Different managers would use their own different methods of getting the work done. But there is always one best method. Right from procurement of raw materials till the final product is delivered to the customer every activity is the part of method study. The objective of whole exercise is to minimise the cost of production and maximise the satisfaction of the customer.

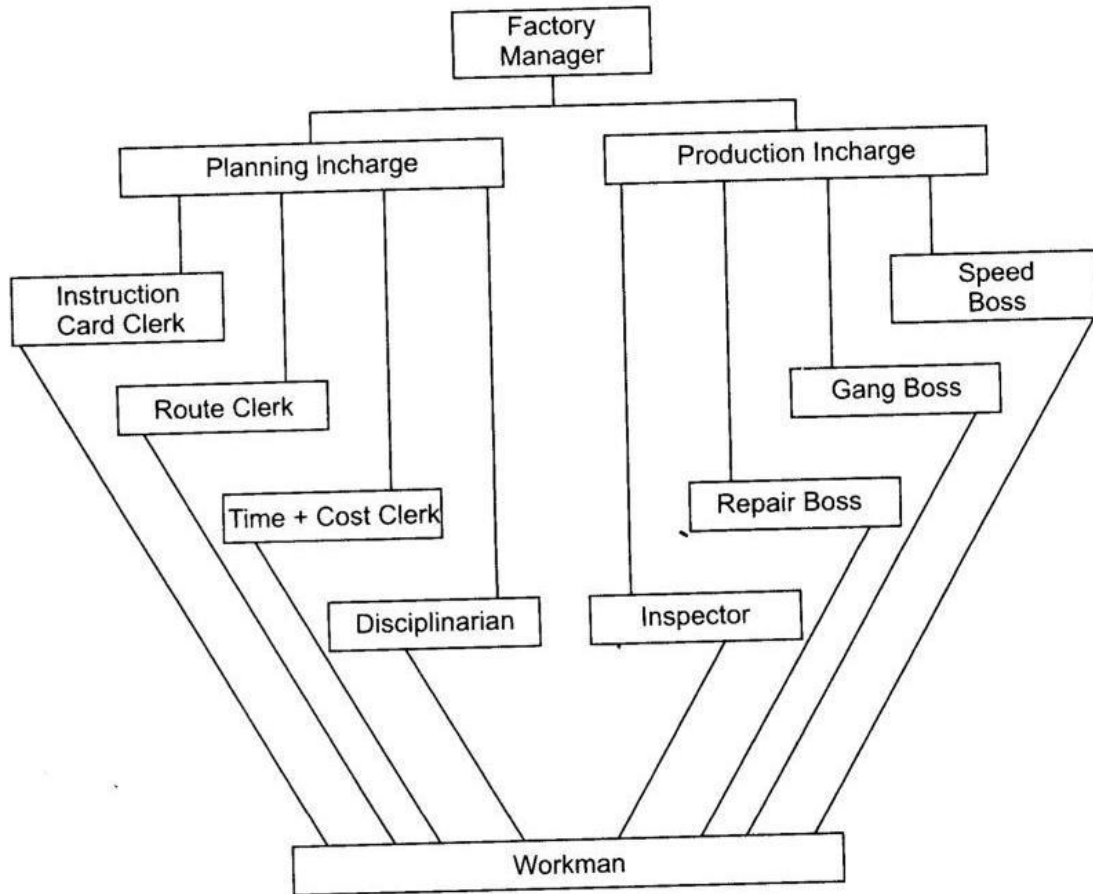
(e) **Simplification and Standardisation of Work** Standardisation refers to the process of setting standards for every business activity e.g., process, raw material, time, product, machinery, methods or working conditions. The objective of standardisation are

- (i) To reduce product to fixed types, sizes, features etc.
- (ii) To establish interchangeability of various parts.
- (iii) To establish standards of excellence and quality in materials.
- (iv) To establish standards of performance of men and machines.

Simplification aims at eliminating unnecessary diversity of products. It results in savings of cost of labour, machines and tools. It implies reduced inventories, fuller utilisation of equipment and increasing turnover.

Chapter 2 Principles of Management

5. Discuss the differences between the contributions of Taylor and Fayol.



6. Discuss the relevance of Taylor and Fayol's contribution in the contemporary business environment.

Ans: Relevance of Taylor and Fayol's contribution in the contemporary business environment.

Both Fayol and Taylor have given principles of management to improve efficiency in an organisation. Taylor gave us scientific principles of management which are being adopted by all organisations to improve its productivity at the shop floor level, the principles help in giving effective results. In the same manner, Henry Fayol gave in general principles of management which when implemented at any of the levels-top, middle or lower and helps in achieving better co-ordination, remove ambiguity and encourage the employees to improve their work performance.

Chapter 2 Principles of Management

Multiple Choice Questions

1. Which principle of general management advocates that, “Employee turnover should be minimised to maintain organisational efficiency.”?

- (a) Stability of personnel.
- (b) Remuneration of employees.
- (c) Equity.
- (d) Esprit De Corps.

Answer: (a) Stability of personnel.

2. Through this principle of management, Henri Fayol guides the managers to exhibit exemplary behaviour and advises that they should not fall into the temptation of misusing their powers for personal benefit at the cost of the general interest of the organisation. Which principle of management is being described in the above statement?

- (a) Remuneration of employees.
- (b) Centralisation and decentralisation.
- (c) Subordination of individual interest to the general interest.
- (d) Equity.

Answer: (c) Subordination of individual interest to the general interest.

3. According to Henri Fayol, if this principle of general management is violated, “Authority is undermined, discipline is in jeopardy, order disturbed and stability threatened.” Identify the principle.

- (a) Authority and responsibility

Chapter 2 Principles of Management

- (b) Discipline
- (c) Unity of command
- (d) Equity

Answer: (b) Discipline

4. Name the principle of management suggested by Henri Fayol, which advocates that, “There should be good superiors at all levels, clear and fair agreement and judicious application of penalties.”

- (a) Authority and responsibility
- (b) Esprit De Corps
- (c) Order
- (d) None of the above

Answer: (d) None of the above

5. According to this principle of general management, “An organisation should safeguard against abuse of managerial power, but at the same time a manager should have the necessary authority to carry out his responsibility.” Name the principle of management is described in the given statement.

- (a) Discipline
- (b) Authority and responsibility
- (c) Unity of command
- (d) Unity of direction

Answer: (b) Authority and responsibility

Chapter 2 Principles of Management

6. The application of this principle of management leads to higher production and better work for the same effort. Identify the related principle of general management.

- (a) Discipline
- (b) Equity
- (c) Division of work
- (d) Order

Answer: (c) Division of work

7. The technique of differential piece rate system was developed by Taylor in order to

- (a) Discriminate between efficient and inefficient workers
- (b) Reward the efficient worker
- (c) Motivate the inefficient workers to perform better
- (d) All of the above

Answer: (d) All of the above

8. This technique of scientific management aims to determine the amount and frequency of rest intervals that should be provided to the employees during working hours.

- (a) Time study
- (b) Method study
- (c) Motion study

Chapter 2 Principles of Management

(d) None of the above

Answer: (d) None of the above

9. Which of the following is an objective of time study?

(a) To determine the number of workers to be employed

(b) To formulate suitable incentive schemes

(c) To calculate the labour costs

(d) All of the above

Answer: (d) All of the above

10. This technique of scientific management helps in the development of the concept of the assembly line, which is widely used in automobile companies these days as well. Identify the technique.

(a) Motion study

(b) Standardisation and simplification of work

(c) Method study

(d) Time study

Answer: (c) Method study

11. The objective of this technique of scientific management is to reduce a given line or a product to fixed type sizes and characteristics. Name the technique.

(a) Method study

(b) Differential piece wage system

(c) Standardisation and simplification of work

Chapter 2 Principles of Management

(d) Functional foremanship

Answer: (c) Standardisation and simplification of work

12. The concept of Work-Study techniques includes

(a) Time study

(b) Motion study

(c) Fatigue study

(d) All of the above

Answer: (d) All of the above

13. Considering the fact that it is difficult to find one single person with all the needed qualities, Taylor suggested the appointment of a specialist through this technique of scientific management. Identify the technique.

(a) Standardisation and simplification of work

(b) Method study

(c) Functional foremanship

(d) Motion study

Answer: (c) Functional foremanship

14. According to Taylor, “Each specialist is to be assigned work according to his/her qualities, the employees who possess technical mastery should be involved in planning work whereas those with energy and good health may be assigned execution work.” Name the related principle of scientific management.

(a) Functional foremanship

Chapter 2 Principles of Management

- (b) Science, not the rule of thumb
- (c) Development of each and every person to his or her greatest efficiency and prosperity
- (d) None of the above

Answer: (c) Development of each and every person to his or her greatest efficiency and prosperity

15. According to this principle of scientific management, the employees should be rewarded for their suggestions which results in a substantial reduction in the cost.

- (a) Science, not the rule of thumb
- (b) Cooperation, not individualism
- (c) Harmony, not discord
- (d) All of the above

Answer: (b) Cooperation, not individualism

Summary

Principle

A principle is a fundamental statement of truth that provides guidance to thought and action.

Principles of Management

Principles of management are broad and general guidelines for managerial decision making and behavior (i.e. they guide the practice of management).

Nature of Principles of Management

The nature of principles of management can be described in the following points:

- 1. Universal applicability** i.e. they can be applied in all types of organizations, business as well as non-business, small as well as large enterprises.
- 2. General Guidelines:** They are general guidelines to action and decision making

Chapter 2 Principles of Management

however they do not provide readymade solutions as the business environment is ever changing or dynamic.

3. Formed by practice and experimentation: They are developed after thorough research work on the basis of experiences of managers.

4. Flexible: Which can be adapted and modified by the practicing managers as per the demands of the situations as they are man-made principles.

5. Mainly Behavioural: Since the principles aim at influencing complex human behaviour they are behavioural in nature.

6. Cause and Effect relationship: They intend to establish relationship between cause & effect so that they can be used in similar situations.

7. Contingent: Their applicability depends upon the prevailing situation at a particular point of time. According to Terry, “Management principles are ‘capsules’ of selected management wisdom to be used carefully and discretely”.

Significance of the Principles of Management

The significance of principles of management can be derived from their utility which can be understood from the following points:

1. Providing managers with useful insights into reality: Management principles guide managers to take right decision at right time by improving their knowledge, ability and understanding of various managerial situations and circumstances.

2. Optimum utilization of resources and effective administration: Management principles facilitate optimum use of resources by coordinating the physical, financial and human resources. They also help in better administration by discouraging personal prejudices and adopting an objective approach.

3. Scientific decisions: Decisions based on management principles tend to be more realistic, balanced and free from personal bias.

4. Meeting the changing environmental requirements: Management principles provide an effective and dynamic leadership and help the organization to implement the changes.

5. Fulfilling social responsibility: Principles of management not only help in achieving organizational goals but also guide managers in performing social responsibilities. Example : “Equity” and “Fair” remuneration.

6. Management training, education and research: Management principles are helpful in identifying the areas in which existing and future managers should be

Chapter 2 Principles of Management

trained. They also provide the basis for future research.

Fayol's Principles of Management

About Henry Fayol: Henry Fayol (1841-1925) got degree in Mining Engineering and joined French Mining Company in 1860 as an Engineer. He rose to the position of Managing Director in 1888. When the company was on the verge of bankruptcy. He accepted the challenge and by using rich and broad administrative experience, he turned the fortune of the company. For his contributions, he is well known as the “Father of General Management”.

Principles of Management developed by Fayol

1. Division of work: Work is divided in small tasks/job and each work is done by a trained specialist which leads to greater efficiency, specialization, increased productivity and reduction of unnecessary wastage and movements.

2. Authority and Responsibility: Authority means power to take decisions and responsibility means obligation to complete the job assigned on time. Authority and responsibility should go hand in hand. Mere responsibility without authority, makes an executive less interested in discharging his duties. Similarly giving authority without assigning responsibility makes him arrogant and there is fear of misuse of power.

3. Discipline: It is the obedience to organizational rules by the subordinates. Discipline requires good supervisors at all levels, clear and fair agreements and judicious application of penalties.

4. Unity of Command: It implies that every worker should receive orders and instructions from one superior only, otherwise it will create confusion, conflict, disturbance and overlapping of activities.

5. Unity of Direction: Each group of activities having the same objective must have one head and one plan. This ensures unity of action and coordination.

Difference between Unity of Command and Unity of Direction

Basis	Unity of Command	Unity of Direction
1. Meaning	It means that a subordinate should receive orders and instructions from one boss only.	It advocates ‘one head, and one plan’ for a group of activities having the same objectives. The activities should

Chapter 2 Principles of Management

		be directed towards the common goals.
2.Scope	This principle is related to the functioning of personnel	This principle is related to the functioning of a department or the organization as a whole
3.Purpose	The main purpose of unity of command is to avoid confusion and fix up the responsibility of the employee.	The purpose of unity of direction is to direct the efforts of employees of one department in achieving the main objective of that department.
4.Results in	Systematic working and improved efficiency by removing confusion and chaotic conditions	Co-ordination within a particular department and overall; by preventing overlapping of various activities.

7. Remuneration of Employees: The overall pay and compensation should be, fair to both employees and the organization. The wages should encourage the workers to work more and better.

6. Subordination of Individual Interest to General Interest: The interest of an organization should take priority over the interest of any one individual employee.

8. Centralization and Decentralization: Centralization means concentration of decisions making authority in few hands at top level. Decentralization means evenly distribution of power at every level of management. Both should be balanced as no organization can be completely centralized or completely decentralized.

9. Scalar Chain: The formal lines of authority between superiors and subordinates from the highest to the lowest ranks is known as scalar chain. This chain should not be violated but in emergency employees at same level can contact through Gang Plank by informing their immediate superiors.

10. Order: A place for everything and everyone and everything and everyone should be in its designated place. People & material must be in suitable places at appropriate time for maximum efficiency.

11. Equity: The working environment of any organization should be free from all forms of discrimination (religion, language, caste, sex, belief or Basis Unity of Command Unity of Direction nationality) and principles of justice and fair play should be followed. No worker should be unduly favoured or punished.

Chapter 2 Principles of Management

12. Stability of Personnel: After being selected and appointed by rigorous procedure, the selected person should be kept at the post for a minimum period decided to show results.

13. Initiative: Workers should be encouraged to develop and carry out their plan for improvements. Initiative means taking the first step with self-motivation. It is thinking out and executing the plan.

14. Espirit De Corps: Management should promote team spirit, unity and harmony among employees. Management should promote a team work.

Taylor's Scientific Management

Fredrick Winslow Taylor (1856-1915) was a person who within a very short duration (1878-1884) rose from ranks of an ordinary apprentice to chief engineer in Midvale Steel Company, U.S.A. Taylor conducted a number of experiments and came to conclusion that workers were producing much less than the targeted standard task. Also, both the parties – Management and workers are hostile towards each other. He gave a number of suggestions to solve this problem and correctly propounded the theory of scientific management to emphasize the use of scientific approach in managing an enterprise instead of hit and trial method. For his contributions, he is well known as the “Father of the Scientific Management”. Scientific Management attempts to eliminate wastes to ensure maximum production at minimum cost.

Principles of Scientific Management

(1) Science, not rule of Thumb: There should be scientific study and analysis of each element of a job in order to replace the old rule of thumb approach or hit and miss method. We should be constantly experimenting to develop new techniques which make the work much simpler, easier and quicker.

(2) Harmony, Not discord: It implies that there should be mental revolution on part of managers and workers in order to respect each other's role and eliminate any class conflict to realize organizational objectives.

(3) Cooperation not individualism: It is an extension of the Principle of Harmony not discord whereby constructive suggestions of workers should be adopted and they should not go on strike as both management and workers share responsibility and perform together.

(4) Development of each and every person to his or her greatest Efficiency and Prosperity: It implies development of competencies of all persons of an

Chapter 2 Principles of Management

organization after their scientific selection and assigning work suited to their temperament and abilities. This will increase the productivity by utilizing the skills of the workers to the fullest possible extent.

1. Functional Foreman-ship: Functional foreman-ship is a technique in which planning and execution are separated. There are eight types of specialized, professionals, four each under planning and execution who keep a watch on all workers to extract optimum performance.

Planning Incharges:

- 1. Route Clerk** to specify the exact sequence and route of production.
- 2. Instruction card clerk** is responsible for drafting instructions for the workers.
- 3. Time and cost clerk** to prepare time and cost sheet for the job.
- 4. Shop Disciplinarian** to ensure discipline and enforcement of rules and regulations among the workers.

Production Incharges:

- 1. Gang boss** is responsible for keeping tools and machines ready for operation.
- 2. Speed boss** is responsible for timely and accurate completion of job.
- 3. Repair boss** to ensure proper working conditions of tools and machines.
- 4. Inspector** to check quality of work.

2. Standardization and Simplification of work: Standardization refers to developing standards for every business activity whereas Simplification refers to eliminating superfluous varieties of product or service. It results in savings of cost of labour, machines and tools. It leads to fuller utilization of equipment and increase in turnover.

3. Method Study: The objective of method study is to find out one best way of doing the job to maximize efficiency in the use of materials, machinery, manpower and capital.

(1) Which technique of scientific management is being violated here?

(Hint: Functional Foreman ship.)

(2) Write one consequence of this violation.

4. Motion Study: It is the science of eliminating wastefulness resulting from using unnecessary, ill-directed and inefficient motions by workers and machines to identify best method of work.

5 Time study: It determines the standard time taken to perform a well-defined job.

Chapter 2 Principles of Management

The objective of time study is to determine the number of workers to be employed, frame suitable incentive schemes & determine labour costs.

6. Fatigue study: Fatigue study seeks to determine time and frequency of rest intervals in completing a task. The rest interval will enable workers to regain their lost stamina thereby avoiding accidents, rejections and industrial sickness.

7. Differential piece wage system: This system links wages and productivity. The standard output per day is established and two piece rates are used: higher for those who achieve upto and more than standard output i.e. efficient workers and lower for inefficient and slow workers. Thus, efficient workers will be rewarded & inefficient will be motivated to improve their performance.

For example: Standard task is 10 units. Rates are: Rs 50 per unit for producing 10 units or more and Rs 40 per unit for producing less than 10 units

Worker A produces 11 Units; he gets Rs 550 (11 units x 50 per unit)

Worker B produces 09 units; he gets Rs 360 (9 units x 40 per unit)

This difference of Rs 190 will motivate B to perform better.

Basis	Fayol	Taylor
1. Nature of Research	He developed the theory of Functional management or Management process.	He developed the concept of Scientific management.
2. Concern	His principles are concerned with management efficiency.	His principle and techniques are concerned with workers efficiency.
3. Level	He designed principles for top level of management.	He designed principles for lower level of management.
4. Focus	Improving overall administration by observing certain principles was his main focus.	For him increasing productivity through work simplification was main focus.
5. Personality	He developed the personality of a researcher and practioner and was called as 'father of general management.	He developed the personality of scientist and was called as 'father of scientific management
6. Major contribution	Hid main contribution was to produce a systematic theory of	He provided a basis on accomplishment on production

Chapter 2 Principles of Management

	management with the help of fourteen principles of general management.	line with the help of scientific techniques and management.
7. Human element	He gave due emphasis to human elements by suggesting principles like equality, initiative, fair remuneration etc.	He ignored the human element and emphasized more on increasing productivity.
8. Rigidity and flexibility	His principles were flexible.	He was rigid in his approach and he felt that there should be no deviation from fixed standards.
9. Applicability	His principles are applicable to business as well as non-business organizations i.e. are applicable universally.	His principles are applicable to production and manufacturing i.e. are applicable to specific situations.
10. Unity of command	He strictly follow this principles i.e. one boss for one employee.	He did not follow this principle instead he insisted on minimum eight bosses.

8. Mental Revolution: It involves a complete change in mental outlook and attitude of workers and management towards one another from competition to cooperation. The management should create pleasant working conditions & workers should work with devotion and loyalty. Instead of fighting over distribution of profits, they must focus attention on increasing it