

Chapter 2: Principles of Management

NCERT · Class 12 · Business Studies

Textbook exercises

Question 1

What makes principles of management flexible?

Solution

Ans: The principles of management can be modified according to the demand of the situation, hence they are not rigid, and enjoy flexibility.

Question 2

State the main objective of time study.

Solution

Ans: To determine the standard time taken to perform a well: defined job.

Question 3

Name the principle that is an extension of the 'harmony, not discord'.

Solution

Ans: Cooperation, not individualism.

Question 4

State any two causes of fatigue that may create hindrance in the employee's performance.

Solution

Ans: The two causes of fatigue are:

- Long working hours without breaks,
- Dissatisfactory working conditions.

Question 5

Sanaklal and Gagan started their career in Wales Limited after going through a rigorous recruitment process. Since they had no prior work experience, the firm decided to give them one year to prove themselves. Name the principle of management followed by Wales Limited.

Solution

Ans: Wales Limited followed the principle of 'Stability of Personnel'.

Question 6

Which technique is used by Taylor for distinguishing efficient and inefficient workers?

Solution

Ans: Differential Piece Wage System was used by Taylor under which workers are paid according to their efficiency. An efficient worker will get higher wages as compared to an inefficient worker.

Question 7

How is the principle of 'Unity of Command' useful to management? Explain briefly.

Solution

Ans: Unity of command states that a person should get orders from, and be answerable to only one superior. If a person gets orders from two or more superiors at the same time, unity of command is violated and it leads to confusion for the employee regarding what tasks to be done and whom to report.

Therefore, to maintain a smooth workflow and stability in the organization, unity of command is essential for management. If there is no unity of command, all the employees will be confused regarding what is to be done, and who to listen, which will consequently disrupt the flow of work, causing delays and efficiency.

Question 8

Define Scientific Management. State any three of its principles.

Solution

Ans: Scientific management means the use of tools and techniques and specialized personnel to carry out the task for achieving better quality and cost reduction. It is a theory of management developed by Frederick Taylor in 1911 which focuses on the ways of getting the work done in the best and most cost-effective way.

Three principles of scientific management

1. Science, not rule of thumb: In this principle Taylor states that the management should follow scientific methods and not the 'Rule of Thumb' approach. Rule of thumb insists on finding solutions through trial and error approach. Taylor says that following scientific methods will result in tremendous savings of time and materials.
2. Cooperation not individualism: A spirit of cooperation should exist between the workers and management, and not the spirit of individualism. Both management and the workers should cooperate with each other. Management should consider all the good suggestions made by the employees and workers should never think of doing unreasonable things to get their demands fulfilled.
3. Development of each and every person to his /her greatest efficiency and prosperity: In this principle, Taylor said that adequate opportunities and training must be available for employees, so that with increased skills, and better knowledge about how to do a task, they can work for the improvement of their performance, and enhancement of efficiency and achieve greater heights in their careers.

Question 9

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

Solution

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

According to this principle there should be a place for everything and everyone and every person or thing should be found in its/his allocated place. If this principle is violated then the objectives will not be achieved efficiently and effectively. Since a lot of time will be wasted in finding out the resources, a lot of wastage of energy and delay in taking decisions or performing the work will take place.

Question 10

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

Solution

Ans: Significance of principles of management are as follows:

1. Optimum utilisation of resources and effective administration: Principles of management are designed in a way that they guide the managers whenever need arises, hence they can take decisions on time without wasting their time attempting trial and error methods. This results in enhancement of productivity, time and cost saving as well as optimum utilisation of resources.
2. Scientific decisions: Principles of management help in scientific decision making because the decisions based on principles are free from bias and prejudice. Here emphasis is on logic rather than blind faith.
3. Meeting changing environment requirements: Principles of management help the managers in meeting the changing environmental needs because they are flexible in nature and can be modified according to the changes taking place in the environment.
4. Provide managers with useful insights into real world situations: Principles of management provide useful insights into reality, as they are made after considering the past mistakes. This helps in saving time by solving recurring problems quickly. Principles also increase managers

knowledge, skills, ability and understanding of managerial situations and circumstances.

Question 11

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

Solution

Ans: Scalar chain requires the managers to follow a well defined chain of communication that flows from top to bottom. That is in a scalar chain, the information passes in a certain and defined manner from the top to bottom so as to avoid any ambiguity in communication.

Gang plank is an exception of scalar chain that states that in the situation of emergency where quick decisions and communications are needed, two managers who are working at the same managerial position can have a quick communication with one another.

For example:

- A is heading 2 teams where B and F are at the same level, C and G are at the same level and D and H are at the same level.
- Line of communication is B - C - D and F - G - H. In this D and H cannot directly contact each other, as per the principle of scalar chain.
- But if an emergency arises, then using the prescribed flow may take a lot of time to communicate with each other.
- Hence, to avoid this problem a system known as 'Gang plank' which is an exception of the scalar chain was introduced where employees working at the same level such as D or H could contact each other whenever urgent need arises.

(Image Will Be Updated Soon)

Question 12

A production manager at top level in a reputed corporate, Mr. Rathore holds the responsibility for ordering new material for the firm. While deciding on the supplier for the financial year 2017-18, he gave the order to his cousin at a higher price per unit instead of the firm's usual supplier who was

willing to lower the rates for the order. Which principle of management was violated by Mr. Rathore? What are the positive impacts of following the above identified principle?

Solution

Ans: The principle of subordination of individual interest to general interest is violated. According to this principle, an individual should give priority to its organizational goals over any personal interest.

The positive impacts of following this principle are:

- Better coordination between personal and organizational goals.
- Maintenance of peace and harmony within the organization.
- Increase in employee productivity as their efforts are directed towards the fulfilment of organizational goals, which will further help them in achieving their personal goals.
- Employees do not feel separated from the organization.
- Helps in achieving organizational goals.

Question 13

Explain the principles of scientific management given by Taylor.

Solution

Ans: The principles of scientific management given by Taylor are as follows:

1. Science, not Rule of Thumb : This principle states that the management should follow scientific methods and not the rule of thumb method, which insists on finding solutions through trial and error approach. According to Taylor, following scientific methods will result in tremendous savings of time and materials, as well imparts more simplicity and ease of performing work.
2. Cooperation, Not Individualism: A spirit of cooperation should exist between the workers and management, and not the spirit of individualism. Both management and workers should cooperate with each other, and work collectively and cooperatively for the achievement of organizational goals. Management should consider all the good suggestions made by the employees and workers should never think of doing unreasonable things to the management to get their demands fulfilled.

3. Harmony, Not Discord: There must exist proper peace and harmony between the management and the workers for the smooth flow of the operations of the organization. As managers are the link between workers and the owners, the management should share profits with workers to keep them motivated and workers should also be willing to accept the changes for the good of the company.

During times of conflict between management and workers, both should change their thinking and mentality towards each other, this concept is called mental revolution.

1. Development of each and every person to his/ her greatest efficiency and prosperity: According to this principle, adequate opportunities and training must be made available to employees, so that they strive to improve their performance and efficiency through enhanced skills, and are able to achieve new heights in their careers.

Question 14

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

A.

Unity of Direction:

B.

Equity:

C.

Esprit de Corps:

D.

Order :

Solution

Ans: According to this principle, the efforts of each unit of the organization having a similar head and plan should move towards the achievement of the same objectives. Each division should have its own incharge and resources, so as to prevent overlapping of activities.

For Example: A company manufacturing two different products should have separate incharge for both the products. Hence two different departments and divisions needs to be created. In case there is a single incharge, then there might be chances of duplication and poor utilisation of resources.

Ans: According to this principle, All the employees should be treated equally and as fairly as possible. No one should be discriminated against on the basis of their caste, religion, complexion, gender, nationality etc.

Example: Men and women should be treated equally in a company.

Ans: It means unity is strength. According to this principle management should promote a spirit of mutual trust and belongingness among team members. It focuses on the word 'We' Instead of 'I'

For example: In the military all the soldiers work together with trust and confidence for the other members so as to collectively achieve their goal.

Ans: According to this principle, there should be a place for everyone and everything and each person or the thing should be found in its/ his place. It helps in carrying out the activities on time, and in a smooth manner.

For Example: In a plant layout, production is supposed to be taken on Machine 1 and Machine 2 in a sequence, then both the machines should be arranged near to each other. If both the machines are far away from each other, then there can be delay in the production process, thus causing reduced productivity, and high costs.

(e) Centralisation and Decentralisation:

Ans: Centralisation is the concentration of power in the hands of selected persons in an organization. Decentralisation means sharing the authority with middle and lower levels in the organization. A balance should exist between complete centralisation and decentralisation in the organization.

For Example: When all the decisions making powers are in the hands of top level management, it is centralisation, it is suitable in cases like military etc., and if the power to take decisions is shared to middle and lower levels then it is decentralisation, it is suitable when the other level of management have suitable knowledge and skills to take a decision.

(f) Initiative:

Ans: According to this principle, workers should be provided with incentives to keep them motivated to work for the achievement of organizational goals. They should be encouraged to carry out their plans for improvement, it will make them comfortable to take more initiatives for the development of the organization.

For example, considering the suggestions and feedback from the workers while making decisions will make them feel motivated and a part and parcel of the organization.

Question 15

Explain the technique of 'Functional Foremanship' and the concept of 'Mental Revolution' as enunciated by Taylor.

Solution

Ans: Functional Foremanship is an extension to the principle of division of labor. In this technique each worker will work under eight foreman in the related process or function of production.

Taylor divides the eight foreman under two incharges:

- Planning incharge
- Production incharge.

Planning incharge includes:

- Instruction card clerk: His role is to give instructions to workers.
- Route clerk: He is responsible for the specification of the production route.
- Time and cost clerk: His role is to prepare time and costs sheets.
- Disciplinarian: His role is to ensure discipline.

Production incharge includes:

- Speed boss: His role is to ensure that the work completes in a timely and accurate manner.
- Gang boss: He is responsible to keep machines and tools in a ready state of work.

- Repairs boss: His role involves keeping the machines and tools in proper working conditions, and arranging for their repairs as and when needed.
- Inspector: He is responsible for checking the quality of work.

Mental revolution:

Mental revolution focuses on the transformation of the mindset and attitude of workers and management towards each other. Management should try their best to satisfy the needs of the employees and workers should also do their best in order to develop the organization. Both should realise the importance of each other and cooperate with one another.

Question 16

Discuss the following techniques of Scientific work Study.

A.

Time Study:

B.

Motion Study:

C.

Fatigue Study:

D.

Method Study:

Solution

Ans: Time study helps in finding out the standard time required to perform a well- defined job. Time study also assists in the determination of wages, drafting incentive schemes, manpower requirements etc.

Ans: It refers to the study of movements like changing positions, lifting objects, putting objects etc., which are undertaken while doing a job. The objective of motion study is to eliminate the unnecessary

movements in order to complete a task in a shorter time.

Ans: It seeks to determine the amount and frequency of rest intervals in completing a task to increase productivity. Rest is essential to perform the work with full capacity. This study helps to find out the standard intervals of break that help a worker to regain its energy.

Ans: The objective of method study is to find out the best way of doing the job. By determining the best method one can minimise the cost of production and maximise the quality and satisfaction of the customer.

(e) Simplification and standardization of work:

Ans: Standardization refers to setting of standards or benchmarks for every business activity, such as standardization of work, process, etc. Standardization thrives to achieve quality work, and quality products by establishing standards of performance for men and machines. For example there are standards for gold (hallmark), agricultural products (Agmark), industrial products (ISI) that assure that the product is a quality product.

Simplification of work aims at eliminating the unnecessary diversity in the products. It helps in savings of cost of labor, machine and tools and increased turnover. There are shoe sizes, cloth sizes such as M, L, XL etc., this is done to reduce unnecessary variations, and expenses.

Question 17

Discuss the differences between the contributions of Taylor and Fayol.

Solution

Ans: The differences between the contributions of Taylor and Fayol are:

Basis of Comparison	Taylor's Contributions	Fayol's Contributions
Concept	Scientific theory of management	General theory of administration
Personality	Taylor was a practitioner	Fayol was a scientist
Focus	Top level of management	Lower level of management

Applicability	Applicable in specialized situations	Universal applicability
Objective	Increasing productivity	Improving overall administration
Basis of formation	Based on observations and experimentation	Based on personal experience
Approach	The approach is that of an engineer	The approach is that of a manager

Question 18

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

Solution

Ans: Principles of both Taylor and Fayol play a significant role in the contemporary business environment.

- Act as guidelines: These principles act as a guideline to managers for making decisions and taking appropriate actions.
- Flexible: Such principles can be modified according to the demand of the situation which helps the managers to solve the problem accordingly.
- Can be used in a number of situations: It can be used in various situations and the decisions based on this will be backed by facts and logic which makes it more applicable.
- Provides lessons: These principles help the managers to learn from their past mistakes by providing insight into real word business.
- Universally Applicable: These principles have universal applicability which makes them more reliable.
- Higher efficiency: It helps in development of an organization by improving efficiency and effectiveness with minimum use of resources and cost.

Question 19

'Bhasin' limited was engaged in the business of food processing and selling its products under a popular brand. Lately the business was expanding due to good quality and reasonable prices. Also with more people working the market for processed food was increasing. New players were also coming to cash in the new trend. In order to keep its market share in the short run the company directed its existing workforce to work overtime. But this resulted in many problems. Due to increased pressure of work the efficiency of the workers declined. Sometimes the subordinates had to work for more than one superior resulting in declining efficiency. The divisions that were previously working on one product were also made to work on two or more products. This resulted in a lot of overlapping and wastage. The workers were becoming indisciplined. The spirit of teamwork, which had characterised the company, previously was beginning to wane. Workers were feeling cheated and initiative was declining. The quality of the products was beginning to decline and market share was on the verge of decrease. Actually the company had implemented changes without creating the required infrastructure.

- a. Identify the Principles of Management (out of 14) that were being violated by the company.
- b. Explain these principles in brief.
- c. What steps should the company management take in relation to the above principles to restore the company to its past glory?

Solution

Ans: Following principles of management were violated:

- Unity of Command: As employees were working under more than one superior.
- Unity of Direction: As the divisions were made to work on more than one product.
- Esprit de Corps: As the workers lacked the spirit of teamwork.
- Discipline: The workers were getting disciplined due to increased pressure.
- Initiative: As workers were feeling cheated, and were lacking any initiative.
- Order: The implementation of changes were made without arranging for proper infrastructure.
- Division of work: They were made to work overtime, without any proper division of work.

Ans: The principles are explained below:

- **Unity of Command:** There should be one and only one superior for every individual employee as if the employees receives orders from more than one superior, then it may lead to confusion in the minds of employers regarding what to do and who to follow.
- **Unity of Direction:** According to this principle, the efforts of each unit of the organization having a similar head and plan should move towards the achievement of the same objectives. Each division should have its own incharge and resources, so as to prevent overlapping of activities.
- **Esprit de Corps:** According to this principle, efforts should be made on the part of management to promote a sense of mutual trust and belongingness among the team members. Also use of the word 'We' should be prioritized over the word 'I' to inculcate the sense of unity among the members.
- **Discipline:** Everyone should follow the rules and regulations which are necessary for the working of the organization.
- **Initiative:** According to Fayol, subordinates should be encouraged to make and execute plans within the prescribed limits of authority.
- **Order:** According to this principle, there should be a place for everyone and everything and each person or the thing should be found in its/ his place. It helps in carrying out the activities on time, and in a smooth manner.
- **Division of work:** Each task is performed by a specialist or trained employee so that it will be completed effectively and efficiently.

Ans: Steps which can be taken by the company are:

- Motivation and proper incentive should be provided to workers.
- Scientific management should be adopted.
- Teamwork and coordination should be promoted for development of the organization.
- One subordinate should receive instruction from one superior only for smooth functioning of the organization.
- There must be separate divisions for different products.
- Efforts should be made regarding the arrangement of proper infrastructure.

- The work should be divided optimally, and overtime should be avoided.

Question 20

(Further information related to the above question) The management of company Bhasin limited now realised its folly. In order to rectify the situation it appointed a management consultant: Mukti Consultants to recommend a restructure plan to bring the company back on the rails. Mukti Consultants undertook a study of the production process at the plant of the company Bhasin limited and recommend the following changes:

- The company should introduce scientific management with regard to production.
- Production Planning including routing, scheduling, dispatching and feedback should be implemented.
- In order to separate planning from operational management ' Functional Foremanship' should be introduced.
- 'Work study' should be undertaken to optimise the use of resources.
- 'Standardisation' of all activities should be implemented to increase efficiency and accountability.
- To motivate the workers ' Differential Piece Rate System' should be implemented.

(The above changes should be introduced apart from the steps recommended as an answer to part c case problem above.)

It was expected that the changes will bring about a radical transformation in the working of the company and it will regain its pristine glory.

(a) Do you think that introduction of scientific management as recommended by M consultants will result in intended outcome?

(b) What precautions should the company undertake to implement the changes?

(c) Give your answer with regard to each technique separately as enunciated in points 1 through 6 in the case problem.

Solution

Ans: Yes, the scientific management techniques recommended by Mukti Consultants will prove beneficial for the organization. It will improve the quantity and quality of product with reduction in costs,

more simplicity and ease of work.

Ans: Following precautions need to be taken:

- Production planning should be implemented in a systematic way.
- Differential piece rate system should not promote unhealthy and ugly competition between the workers.
- Functional foremanship should be introduced with proper motivation for the employees.
- Standardization techniques should be implemented in different aspects of production, and proper methods should be developed for their training so that quality products are produced.
- Employees can be offered monetary incentives to motivate them to work more efficiently.
- Not only work study, other methods should be introduced like motion study, time study, and fatigue study.

Ans: Each technique as specified in the case problem is:

- Scientific management

It means the use of tools and techniques and specialized personnel to carry out the task for achieving better quality and cost reduction. It is a theory of management developed by Frederick Taylor in 1911 which focuses on the ways of getting the work done in the best and most cost-effective way. The firm should adopt scientific management so as to take benefits of better division of labor, cost reduction and increased efficiency.

- Production Plan:

It refers to the planning of production operations so that a smooth and coordinated flow of production is made possible. It involves elements like

- Routing: It determines the route through which the raw materials will be transformed into finished goods.
- Scheduling: It provides a proper timeline and schedule in respect to time, day, date, regarding the beginning and completion of a particular operation.

- **Dispatching:** It involves the issuance of instructions and orders for the commencement of the production work.
- **Feedback:** It refers to the identification of deviations and errors in the production plan, based on the set standards and current performance.
- **Functional Foremanship**

It is an extension to the principle of division of labor. In this technique each worker will work under eight foreman in the related process or function of production. Taylor divides the eight foreman under two incharges so that there is no confusion in the minds of workers regarding their incharges:

- **Planning incharge**
- **Production incharge.**

Hence, the company should employ functional foremanship so as to keep the planning and operational functional separate.

- **Work Study:**

To enhance the efficiency, productivity and performance of the workers, various techniques of work study could be used by the company, such as.

- **Time Study:** Time study helps in finding out the standard time required to perform a well- defined job. Time study also assists in the determination of wages, drafting incentive schemes, manpower requirement etc.
- **Motion Study:** It refers to the study of movements like changing positions, lifting objects, putting objects etc., which are undertaken while doing a job. The objective of motion study is to eliminate the unnecessary movements in order to complete a task in a shorter time.
- **Fatigue Study:** It seeks to determine the amount and frequency of rest intervals in completing a task to increase productivity. This study helps to find out the standard intervals of break that help a worker to regain its energy.
- **Method Study:** The objective of method study is to find out the best way of doing the job. By determining the best method one can minimise the cost of production and maximise the quality and satisfaction of the customer.
- **Standardization**

To ensure proper product quality and accountability, the firm should go for standardization.

It refers to setting of standards or benchmarks for every business activity, such as standardization of work, process, etc so as to achieve quality work, and quality products by establishing standards of performance for both men and machines.

- Differential Piece Wage System

To keep the workers motivated, and raise their efficiency levels the company should employ a differential piece wage system. It is a system which was used by Taylor under which workers are paid according to their efficiency. An efficient worker will get higher wages as compared to an inefficient worker.
