# <u>UNIT 5</u> COORDINATION AND CONTROLLING

#### Introduction

The purpose of organising; division of work, department, span of management, centralisation and decentralisation, delegation of authority and organisation structure is to optimally achieve the organisational goals. This is possible if units or departments of the organisation are integrated, united and co-ordinated in a unified direction. Once the activities of the organisation are broken into smaller units which are re-grouped into departments (on the basis of similarity of features), it becomes necessary for managers to coordinate the activities of these departments by communicating the organisational goals to each department, setting departmental goals and linking the performance of each department with that of others so that all the departments collectively contribute towards the organisational goals.

**Coordination** is, thus, "the process of linking the activities of various departments of the organisation."

**Coordination** is "the process of integrating the objectives and activities of the separate units, departments or functional areas) of an organisation in order to achieve organisational goals efficiently."

#### **Definition**

**Coordination** is "integration of the activities of individuals and units into a concerted effort that works towards a common aim." — **Pearce and Robinson Co-ordination** maintains unity of action amongst individuals and departments. Absence of co-ordination will result in sub-optimal attainment of goals. In extreme situations, it may result in losses and liquidation of companies.

**Co-ordination** integrates, harmonises and balances the conflicting opinions of individuals and departments and facilitates their movement in a direction of the organisational goal.

If, for example, the production department does not coordinate its activities with the sales department, production may be more or less than the required sales. Production more than sales will result in piling of stock and blocking up funds in inventory and production less than sales will result in loss of sales revenue and goodwill of the firm. Coordination, thus, facilitates smooth running of a business.

#### **IMPORTANCE OF CO-ORDINATION**

#### 1. Co-ordination encourages team spirit

There exist many conflicts and rivalries between individuals, departments, between a line and staff, etc. Similarly, conflicts are also between individual objectives and organizational objectives. Co-ordination arranges the work and the objectives in such a way that there are minimum conflicts and rivalries. It encourages the employees to work as a team and achieve the common objectives of the organisation. This increases the team spirit of the employees.

## 2. Co-ordination gives proper direction

There are many departments in the organisation. Each department performs different activities. Co-ordination integrates (bring together) these activities for achieving the common goals or objectives of the organisation. Thus, co-ordination gives proper direction to all the departments of the organisation.

#### 3. Co-ordination facilitates motivation

Co-ordination gives complete freedom to the employees. It encourages the employees to show initiative. It also gives them many financial and non-financial incentives. Therefore, the employees get job satisfaction, and they are motivated to perform better.

#### 4. Co-ordination makes optimum utilization of resources

Co-ordination helps to bring together the human and materials resources of the organisation. It helps to make optimum utilization of resources. These resources are used to achieve the objectives of the organisation. Co-ordination also minimizes the wastage of resources in the organisation.

#### 5. Co-ordination helps to achieve objectives quickly

Co-ordination helps to minimize the conflicts, rivalries, wastages, delays and other organizational problems. It ensures smooth working of the organisation. Therefore, with the help of co-ordination an organisation can achieve its objectives easily and quickly.

# 6. Co-ordination improves relations in the organisation

The Top-Level Managers co-ordinates the activities of the Middle Level Managers and develops good relations with them. Similarly, the Middle Level Managers co-ordinates the activities of the Lower Level Managers and develops good relations with them. Also, the Lower Level Managers co-ordinates the activities of the workers and develops good relations with them. Thus, coordination overall improves the relations in the organisation.

# 7. Co-ordination leads to higher efficiency

Efficiency is the relationship between Returns and Cost. There will be higher efficiency when the returns are more and the cost is less. Since coordination leads to optimum utilisation of resources it results in more returns and low cost. Thus, coordination leads to higher efficiency.

# 8. Co-ordination improves goodwill of the organisation

Co-ordination helps an organisation to sell high quality goods and services at lower prices. This improves the goodwill of the organisation and helps it earn a good name and image in the market and corporate world.

## **Principles of Coordination**

Principles refer to fundamental truths on which an action is based. In order to achieve coordination, managers follow the following principles of coordination:

- 1. **Unity of command**: Unity of command means one boss for one subordinate. It will be difficult to achieve coordination if one individual has to report to more than one boss. Unity of Command, thus, helps in coordinating the activities of individuals and departments.
- 2. **Early beginning**: It follows the principle of earlier the better. Managers should initiate efforts to coordinate organisational activities right from the planning stage. If plans are implemented without coordination in mind, it will become difficult to coordinate the working of people at later stages.
- 3. **Scalar chain**: It refers to chain or link between top managers and lower managers. It is a hierarchy of levels where information and instructions flow from top to bottom and suggestion and complaints flow from bottom to top. This chain facilitates coordination as top managers pass only those orders and instructions down the chain which are necessary for subordinates to work efficiently. Subordinates also pass upwards only those suggestions and complaints which they feel should be brought to the notice of top managers through middle managers. Passing of only necessary information facilitates coordination amongst various levels. Scalar chain, thus, facilitates coordination.
- 4. **Continuity:** Managers appreciate the fact that coordination is a continuous process and must be continuously carried out at all levels in every department
- 5. **Span of management**: It refers to the number of subordinates that a manager can manage effectively. It is important to place only as many subordinates under the direction of one manager as can be effectively managed by him. It affects the manager's ability to coordinate the activities of subordinates working under him.
- 6. **Direct contact**: Direct or personal contact between managers and subordinates can achieve better coordination than indirect or impersonal

contact. Face-to face interaction amongst people of different levels or same level in different departments promotes understanding, information and thoughts. This facilitates effective communication and through it, effective coordination.

- 7. **Reciprocity:** It refers to interdependence of activities. Production and sales department, for example, are inter-dependent. The more one sells, the more one needs to produce. The more one produces, the more one attempts to sell what is produced. The nature and extent to which organisational activities are dependent on each other are considered by managers when they initiate to coordinate the organisational activities.
- 8. **Dynamism:** There are no fixed and rigid rules for coordination. Changes in organisational environment necessitate changes in the techniques of coordination also. It is, thus, a dynamic and not static concept.

# **CONTROLLING**

### **Meaning**

Control is one of the important functions of management. Managerial functions start with planning and end with controlling and other functions of management act as the connecting link between planning and controlling.

Control is the process to find out whether actions are being taken as planned and taking corrective actions to make them confirm to plans and then to take the necessary steps to prevent the occurrence of variations in future.

#### **Definitions**

According to **Billy E. Goetz** "Management control seeks to compel events to conform to plans"

According to **J.L.Massie** "Control is checking current performance against predetermined standards contained in the plans with a view to ensuring adequate progress and satisfactory performance".

According to **Robert J. Mockler** "Management control is systematic effort to set performance standards with planning objectives, to design information feedback systems to compare actual performance with these pre-determined standards, to determine whether there are any deviations and to measure their significance and to take any action required to assure that all corporate resources are being used in the most effective and efficient way possible in achieving corporate objectives".

# **Process of Controlling**

Control process has four steps. Even though controls are placed at different stages of operations four phases are always present in each control cycle.

Regardless of what is being controlled these elements are always involved. **Steps in Controlling Process are explained below:** 

# 1. Establishing Standards

In order to evaluate the performance, standards have to be established. Standards are in way levels of activities established by the management. The standards should have certain characteristics:

- a) They must be clearly specified.
- b) They must be understood by all the organizational members.
- c) They should be defined in measurable terms.
- d) Vague wording of the standards should be avoided. Standards should be precisely stated.

In situation where it is not possible to quantify standards, efforts should be made to understood the qualitative goals and design the control mechanisms accordingly.

# Some quantitative standards against which the performance can be measured are given below:

- 1. **Time Standards:** Here the goals are set on the basis of time involved in performing a particular task. It could be units produced per hour, number of pages typed per hour etc. work flow and employee output is better by using time standards.
- 2. **Cost Standards:** These are goals in terms of cost involved. These indicate financial expenditure involved per unit of product. These standards are like monetary check posts and enable the comparison of actual costs with budgeted cost.
- 3. **Income Standards:** These standards set in terms of financial rewards received for a particular activity. Example: Sales volume per month, sales generated by a sales person per year etc.
- 4. **Market Share Standards**: This is based on the percentage of the total market that a company wants to retain or further acquire.
- 5. **Quality Standards:** Standards are based on quality. These standards are used in quality control. But adherence to norms may vary depending on the nature of product involved. Space shuttle and aircraft manufacture have zero defect production requirements while other products may have less stringent quality
- 6. **Productivity**: These are expressed in numerical terms. These are set on the basis of past performance, degree of mechanizations, employee's skills and training required and motivation of employees. Example items produced per man hour.

- 7. **Return on Investment**: It is the ratio of net income to invested capital. It is a useful standard and it involves all facts of the business such as turnover sales, working capital, invested capital, inventory levels at given times, production costs, marketing costs and so on.
- 8. **Quantitative Personnel Standards:** Personnel matters like morale and dedication can be measured to some degree by some quantitative standards. These standards may be the extent of employee turnover, number of grievances, quality performance and so on.

# 2. Measuring Performance

This is the second step in controlling process. It involves monitoring and measuring the actual performance. This includes collection of data regarding actual performance of the activity. Then a comparison can be made between what is to be accomplished and what is intended to be accomplished. It is an ongoing and repetitive process. The frequency of measurement depends upon the type of activity being measured. Continuous monitoring may be required in some cases like that of levels of gas particles in the air in case of manufacturing plant. Long term expansion objectives might be reviewed but the top management only once to twice a year.

# According to Schumann there are six types of evaluation which are given below:

- 1. **Effort:** This involves the extent of input. The idea is to measure whether the input is adequate in meeting the set objectives. For example, the number of patient beds in a hospital would be a measure of input for providing health care. A person's performance may be measured but the number of calls he makes per day.
- 2. **Effectiveness:** Since measurement of input is a poor indicator of results, measurement of output is also required to convey the degree of effectiveness. In case of employment agency, the number of client's placed in jobs would be a better measure than the number of applicants interviewed and counselled.
- 3. **Efficiency:** Efficiency measures are useful for comparing the same process at different points of time or different processes with the same output. Efficiency relates output to input.
- 4. **Process**: Here, the focus is on evaluation of process that converts efforts into results.
- 5. **Measuring devices:** The performance measures used in controlling organizational and individual performances should be valid as well as reliable. The measure should reflect its quality and consistency in obtaining results.
- 6. **Mechanized measuring devices**: The performance measures used in controlling organizational and individual performances should be valid as well as reliable. The measure should reflect its Quality and consistency in obtaining results.

#### > Some measuring devices are given below:

- a. **Mechanized measuring devices:** Variety of technical instruments is used to measure machine operations, product quality for size and ingredients and for production processes. These instruments may be mechanical, electronic or chemical in nature. Computers as measuring devices are becoming important nowadays.
- b. **Ratio analysis:** Various aspects of business operations are measured with the help of this tool. Ratio relates the business variables with one another. There are various ratios like net sales to working capital, net sales ration, net profit to tangible net worth rations, net profit to net working capital ratio, collection period etc. these ratios provide measuring yardsticks for liquidity, profitability. Solvency, capital gearing in the firm and so on.
- c. Comparative statistical analysis: Measuring involves comparison also. Similar operations of different companies can be compared or operations of any company can be compared with the industry average. That is in fact is a practical performance measuring methodology. Data pertaining to the required aspect is used in such cases. Statistical models can be used for such measurements and comparisons.
- d. **Personal observations**: To measure the performances of the personnel usually personal observation is followed. Observation can be formal or informal. Observation is generally day to day routine type. Informal discussions with the concerned persons also contribute
- e. **Sampling:** Measurement can be done by considering only a sample, which is presumably typical of the whole. For some operations sampling does the work of measuring the performance. In some other cases, a hundred percent check is desirable.

# 3. Determining whether performance matches the standard

This step is considered to be the easiest one because the complexities of the process are already dealt in the first two steps. This involves comparing measured results with the standards. If performance matches with the standard set, it is an indication that everything I sunder control. If not, taking corrective action becomes necessary.

# 4. Taking Corrective Action

The last step in the process of control is to take remedial action or corrective action. After identifying the deviations of the actual performance from the standard fixed and determining the causes for the deviations, remedial action has to be taken immediately so as to bring the work back to the desired course

and to prevent the recurrence of adverse deviations in future. The top management generally takes the remedial action.

In this context, it noted that remedial action will vary depending upon the causes of deviations. The control actions or remedial actions can take the form of change in the methods of work, change in the assignments of tasks, change in the technique's direction, change in the organization structure, appointment of additional staff better training of workers, effective leadership, change in the standards set or even change in the organizational objectives.

# **Importance / Advantages of Controlling**

Controlling is regarded as an important management function. Thus, it is something that every manager needs to perform in order to exercise control over his subordinates. Proper controlling measures are often found to be helpful in improving the effectiveness of the other functions of the management.

Controlling ensures efficient and effective use of the resources of the organisation in order to achieve the organisational objectives.

The success of an organisation thus rests on effective controlling. Let us look at some of the points which show the importance of controlling in an organisation

1. Achieving organisational objectives: Controlling is implemented with the purpose of taking care of the organisational objectives. Controlling detects any kind of deviation and accordingly corrective actions are implemented.

This helps in reducing the gap between expected and actual results and in this way helps in achieving the organisational objectives.

- 2. **Coping with changes**: An organisation has to put up with many changes in the environment, which can be emergence of new products and technologies, change in government regulations or changes in strategies of the competitors.
- 3. **Efficient use of resources:** Controlling allows the manager in minimising the wastage of resources and ensuring proper utilisation of the available resources that leads to effective performance by the organisation.
- 4. **Determining the accuracy of standards**: Managers always compare the work done with a set of provided standards defined for the work and determine whether the set of standards are effective or there is a need for improvement in the standards that will lead to more accurate determination of process efficiency.
- 5. **Helps in decision making**: Controlling helps the managers in determining the gap between thinking and actual implementation. It leads to better decision making and improves the overall performance of the organization.
- 6. **Motivates employees:** In organisation employees are also aware that their performance is judged using some set of standards.

Periodic and systematic evaluation of the employee performance and accordingly rewarding the deserving employees in the form of bonus, increment or promotion leads to the employees getting more motivated in order to perform for the organisation.

- 7. **Maintains discipline and order:** Controlling brings about order and discipline in the regular operations of the organization. Employees are also bound by the rules which reduces unprofessional behavior in the organization.
- 8. **Improves coordination:** Controlling provides a common direction to all the activities of the organisation and also aligns employee action with organisational goals, thus ensuring optimum performance.

## **Limitations/ Disadvantages of controlling**

- 1. Control is an expensive process, as it involves a lot of time, effort and money.
- 2. Control system losses its effectiveness unless standards of performance can be defined in quantitative terms. But it is very difficult to set standards of performance in quantitative terms for human behaviour and employee morale.
- 3. Control loses its significance when it is not possible to fix accountability of the subordinates.
- 4. The success of controls mainly depends on the acceptance by one subordinate. But the subordinates may not accept the controls, when they feel that the controls will curtail their freedom.
- 5. An enterprise can have control only the internal factors. It cannot have control over the external factors, such as government place technological changes, social changes etc.

# **The Principles of Control**

The principles of control can be defined as different methodologies, techniques used by the managers to control and monitor various business activities which help for the growth of the organization. These principles also help to protect and safeguard the organization, its assets, liabilities, resources, etc.

# Given below is the list of principles of controlling:

1. **Principle of Reflection of Plans -** Planning and controlling go hand in hand. If any entity has a proper plan then it is much easier to make a control system for that entity. Overall, a proper plan means the control will be more effective. It is the basic principle of control. The principle of reflection of plants plays a predominant role in the organization for its growth in terms of quality and quantity. Planning and controlling are like side by side of a coin. This principle helps to reflect all the plants that were designed in the first stage of the organization.

- 2. **Principle of Prevention** There is a concept named as prevention is better than cure. This will apply to the control function as well. Hence, control does not always focus on the improvement but also on solving the problems as well. It is another important principle of control that helps to prevent the negative aspects of the firm at the initial stage. From the ancient days as we believed prevention is better than cure, this principle helps to realize defects in the beginning and also tries to find remedies for them. Feed forward control is a famous technique used in the principle of prevention.
- 3. **Principle of Future Directed Control** Control is a function which looks forward. With the help of relevant information controls can be directed towards the future and can help in making things much better.
- 4. **Principle of Efficiency of Control** It is very necessary and important that there needs to be efficiency in the approaches and techniques of the system of control.
- 5. **Principle of Action** Control function will only be justified only when there will be remedial action to take. Pointing out the drawbacks will not be enough. There is a need to take action as well to make the management effective and efficient. Every task cannot be made with a plant design on paper. It should take a physical form and put it into action. Then only we can move forward either in Life or in work. This principle of action is also an extension of finding out defects and deviations. It helps to take necessary remedial actions for the findings.
- 6. **Principles of Standards** There are predetermined standards which are already being set up by the company and that needs to be achieved by the workers.
- 7. **Principles of Assurance of Objectives -** Just by detecting the deviations in the work, the company's objectives can be achieved on a quick and more efficient and effective basis.
- 8. **Principle of Organizational Suitability** For having an efficient and effective control, the business organisation structure must be well integrated and clear. It is the most important principle of control in management. Every organization needs to choose a set of principles that are suitable for that particular organization because every organization may vary from its type, size, methodologies, etc.
- 9. **Principle of Responsibility**: Apart from the principles of control, responsibility is the basic duty that should be owned by every employee from a lower level to a higher level of the organization for its smooth and safe growth. It was also helpful in gaining name and fame for the organization.
- 10.**Principle of Exception**: This principle majorly concentrates on minor exceptional cases that may deviate slightly from the standards stated at the beginning of the organization. It also takes care that these exceptions may not disturb or affect the growth of the organization.

- 11.**Principle of Critical Points**: Each organization plays several critical points because of various factors. At that time, the principles of control in management help the managers to pay more attention to these critical points, whether they are expected or unexpected.
- 12.**Principle of the Pyramid**: It is also one of the principles of control that explains the delegation of authority as well as the direction of a message which can pass from the lower level to a higher level. Even though it seems to be General, it plays a very significant role as certain issues may arise for the middle-level employees because of superiors and subordinates.
- 13. Principle of Future-directed Control: This principle of control is completely contrasted to the above principle, which is the feedback principle. It is simply known as the feed-forward principle. Along with the low-level employees, planning and controlling the action, the high-level employees will forecast and monitor the activities going on in the firm, and it takes care of all the activities that need to move smoothly without any deviations or disturbances.
- 14.**Principle of the Standard:** Every organization has a set of standards that need to be obeyed and followed by all levels of the organization. These should be productive and qualitative, for example, punctuality, delegating work, reporting to the required people, etc., all these Commander standards should be transparent and specific to their organization.
- 15.**Principle of Objective**: It is the most common principle of control. Because every organization's motive is to achieve its objective either monetary benefit or fame or any other, this principle always monitors the works for the final objective. It also controls all the deviations and looks after the remedies facilitated to that particular deviation.

# **Techniques of control**

#### PERT/CPM

- ➤ Programme Evaluation and Review Technique (PERT) was first developed in 1958 by USA Navy special project office and a management consulting firm for planning and control of the Polaris Sub-marine Missile Project.
- ➤ Critical path method (CPM) was developed in USA in 1957 by Morgann E. Walker and James Kelley. This method was first used for planning and scheduling the construction of a new chemical plant by DuPont.
- ➤ PERT and CPM are techniques of project management useful in the basic managerial functions of planning, scheduling and control. PERT stands for "Programme Evaluation and Review Technique" and CPM are the abbreviation for "Critical Path Method".

#### **Steps in PERT and CPM**

**Listing activities**: Each project consists of several independent jobs or activities. All these jobs or activities must be separately listed. It is important to identify and distinguish the various activities required for the completion of the project and list them separately.

**Listing order of preference of activities**: Once the list of various activities is ready, the order of precedence for these jobs has to be determined. The order of various sub-units of a job must be decided meticulously so that the output of one job becomes input for the next.

**Determining Relationships among Activities**: Some jobs may be done simultaneously and certain jobs will be dependent upon the successful completion of the earlier jobs.

**Drawing Flowcharts:** The next step is to draw a picture or a graph which portrays each of these jobs and shows the predecessor and successor relations among them it also shows the time required for completion of various jobs. This is known as the project graph or the arrow diagram.

#### **Differences between PERT and CPM**

PERT	CPM
PERT is a project management	CPM is a statistical technique used to
technique used to plan, schedule,	plan, schedule, organize, co-ordinate
organize and control uncertain	and control well-defined activities.
activities.	
PERT is a technique of planning and	CPM is used to control costs and
controlling time.	time.
PERT is used where the nature of the	CPM involves the job of repetitive
job is non-repetitive.	nature
PERT is best for research and	CPM is for non-research projects like
development projects.	construction projects.
PERT deals with unpredictable	CPM deals, with predictable
activities	activities
PERT technique is best suited for a	CPM is appropriate for a reasonable
high precision time estimate.	time estimate.
There are three times estimates in	There is only one estimate in CPM
PERT, i.e., optimistic time, most	
likely time and pessimistic time.	
The crashing concept is not	Crashing is a compression technique
applicable to PERT.	applied to CPM to shorten the project

	duration and reduce cost
PERT uses probabilistic model.	CPM makes use of a deterministic
_	model.
PERT is set according to events	CPM is aligned towards activities.

# **Advantages of PERT and CPM:**

- 1. Simple to understand and use.
- 2. Show whether the project is on schedule; or behind/ahead of the schedule.
- **3.** Identify the activities that need closer attention (critical).
- **4.** Determine the flexibility available with activities.
- **5.** Show potential risk with activities (PERT).
- **6.** Provide good documentation of the project activities.
- 7. Help to set priorities among activities and resource allocation as per priority.

# **EMERGING ISSUES IN MANAGEMENT**

#### 1. Globalization

Globalization means making the world not limited in a boundary i.e. creation of boundary less world. It is the free movement or free flow of factors of production all over the world and there must be no any hindrance and restriction. Management is no longer controlled by national borders. It means free trade in products and service, offering a wide choice of goods to customer around the world.

The growth of regional free trade agreement and World Trade Organization present new challenges and opportunities for managers. It creates extreme competition for markets and also for natural resources. Employment of people coming from across and national boundaries further complicates the management process Values symbols and beliefs of employees differ considerably and these affect the nature of supervisory relationships, decision making styles and overall management systems. The managers of every management should think globally and act locally.

### 2. Workforce diversity

Workforce diversity means that organization is becoming more heterogeneous in terms of gender, ethnicity, race and other backgrounds. Therefore, management needs to deal with diversified workforce consisting of knowledge workers, bimodal workforce, work teams, virtual teams and contingent employees.

Dealing with diversity requires visionary leadership in managers. The managers will need to shift their approaches and philosophy to workforce management. They should recognize the difference among employees and respond to them in ways that they will ensure employees commitment. If diversity is managed positively then it increases creativity and innovations in organizations.

## 3. Ethics and social responsibility

**Ethics** is the set of moral principles and rules guiding an individual's behaviour. It is the basis of determining right or wrong in a given situation. It is an individual perception and belief while taking a decision. Managing ethically is not easy. Conflicts will often arise. There is increasing concern about the role and state of ethics in business because of the belief that business ethics have declined in recent years Managers are concerned because of the complexity of ethics in decision making.

**Social responsibility** includes being aware of society and toward its values and regulations. Modern organizations need to be involved in social concern. In recent years public attention has been focused on the issues of social responsibility of business. Society generally expects contribution to the quality of life and the society. Environment issues have become matters of universal concern.

#### 4. Empowerment

The roles of differences between the manager and the workers have narrowed down considerably. Decision making is being pushed down to the operating level. Workers are now being given the freedom to make choices about schedules, procedures and solving work-related problems. Earlier, managers are considerably further by allowing employees full control of their work. Self-managed work teams, where workers operate largely without bosses, have become the management technique today. Thus, the managers are engaged in empowering employees. They are putting employees in- charge of problems and prospects of their organization. This is the process of empowerment. Various methods of empowerment ranging from simple participation to self-managed work teams have now been practiced in organizations.

#### 5. Technology

Technological environment consists of innovation, techniques and the organized knowledge or the of doing things Technology includes any equipment, tools or operating methods that are designed to make work more

efficient. The managers must grasp a proper understanding of these aspects of technological context. Technology management has now emerged as an important and crucial management activity in modern business firms to match the competitive market Managers have to cope with all these changes taking place in technology and their management.

#### **6.** Innovation and Change

Organizations must pay attention to innovation and change. Otherwise, they will go out of business. Product life span has been shortening every day. Products need continuous improvement, upgradation and modification. Success will go to those organizations that continually improve their product quality. They have to beat their competitors in the marketplace with a constant flow of innovative products and services an organization's employees are the vital forces for innovation and change. If they block innovation and change, the organization will become a candidate for extinction. The challenge for managers is to stimulate employee creativity for innovation and change.

#### 7. Quality and Productivity

Management needs to cope with continuous in product quality. The importance of quality and standards for acceptable quality has increased dramatically in recent years. There is interrelationship between quality and productivity. Quality is the excellence of the product, including its attractiveness, lack of defects, reliability and long-term dependability. Productivity has also become a major issue for organization during recent years. Increase in productivity requires developing and applying techniques and strategies. Low productivity is a threat to competitiveness.

#### 8. Knowledge Management

Knowledge management is the process of capturing, developing, sharing and effectively using organizational knowledge. It refers to a multi-disciplined approach to achieving organizational objectives by making best use of knowledge.

#### **Assignment**

## **Short Answer Questions**

- 1. Give the meaning of Coordination.
- 2. Define Coordination.
- 3. State any four importance of Coordination.
- 4. State any four principles of Coordination.
- 5. Define Controlling.
- 6. What is Controlling?
- 7. What is Span of Control?
- 8. State the process of Controlling.
- 9. Expand: PERT and CPM
- 10. State any four limitations of Controlling.

# **Long Answer Questions**

- 1. Briefly explain the importance of Coordination.
- 2. Explain the principles of effective control.
- 3. Explain principles of Co-ordination.
- 4. Explain the process of controlling.
- 5. Explain Advantages and Disadvantages of Controlling.
- 6. Explain the various controlling techniques.
- 7. Explain the emerging issues in Management.
- 8. "Co-ordination is an essence of management". Explain.
- 9. Differentiate between PERT and CPM