Uttar Pradesh
Rajarshi Tandon Open University

Block

1

FUNDAMENTALS OF MODERN OFFICE MANAGEMENT

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In the present day world, office forms an integral part of any business organisation. In fact, the continuous processing of information by an office keeps the wheels of an organisation moving. However, the smooth functioning of an office depends upon the way various activities are organised, the facilities provided, the working environment, and the building up of proper office systems and procedures. This introductory Block deals with these very aspects in detail.

Unit 1 discusses the principles and functions of a modern office, the process of office management, and the functions of an office manager.

Unit 2 deals with administrative arrangement and facilities, the factors taken into account in choice of office location, and various aspects relating to office space and office layout.

Unit 3 deals with the working environment of the office including interior decoration, choice of furniture and fixtures, and problems of lighting, ventilation, noise, sanitation and security.

Unit 4 explains the meaning and nature of office systems and procedures and the importance of office manual and flow charts.

UNIT 1 NATURE AND SCOPE OF OFFICE MANAGEMENT

Structure

1.0 OBJECTIVES

After reading this unit, you should be able to:

- describe the meaning and scope of the office
- outline the functions of a modern office
- explain the principles of office organisation
- distinguish between centralisation and decentralisation of office services
- describe the processes of office management
- discuss the functions and status of an office manager.

1.1 INTRODUCTION

In your daily life, you cannot go without visiting an office—school office, college office, municipal office, transport office, electricity office, post office, government office etc. for some work or the other. Where you can get your work done easily

and within shortest possible time, you feel that the office is an efficient one. On the other hand, you form a poor opinion about the office where there are people working with files but you find it difficult to get your work done in proper time.

The nature of services provided by a modern office makes it an integral part of every organisation. For the efficient conduct of managerial functions managers are dependent on a large variety of information which are recorded in office records. Prompt availability of records and documents not only make the task of managers easier, but also help them in conducting business activity. These functions can be carried out effectively provided information relating to the past and present business condition are readily available. It is the office where all such information can be readily obtain d. In this unit, you will learn the meaning, importance and the functions of modern office, principles of office organisations, the major process of office management, and the functions and status of an office manager.

1.2 MEANING OF OFFICE

In a fast changing society, every business enterprise is faced with fast ever-changing conditions. Techniques of production have undergone a rapid change and many new techniques are on the way. The ever-widening markets are a challenge by themselves. Also one has to take care of the emerging human relations in the business. Most of these problems of change can be tackled only with the help of "Information". Recording, retaining, analysing and supplying the required information for various purposes to different persons are the basic needs of an enterprise. These activities taken thight reoprrice an im ortant 'services' function perform d in he "office".

The term office is commonly used to mean a place where all paper work is undertaken. The common man's view of an office is a place where some clerks and a few officers sit on chairs with a few files on their table doing some writing on paper. This view-point suggests (a) paperwork, (b) a definite place, and (c) work of a routine nature. But, office work is not confin a to paper work only, and it may not be confined to a particu ar place.

The traditional view of office (held by many even today) is that office work is concerned only with the records of the enterprise, i.e., making records, using records, and preserving them for future reference. Accordingly, the purpose of an office is to provide only clerical assistance to other depart.ments. It also suggests that office work does not involve any productive activity as it consists of routine clerical operations.

The traditional view does not explain all the functions performed by an office. The modern view is that office is the administrative centre of business where relevant records are prepared, preserved, and made available for the purpose of efficient management of the organisation. In a broad sense, office represents service functions which involve clerical work wherever it may be performed. In a modern organisation, there are a ways some people to receive records and supply information and undertake elated activities like receiving and mailing letters, typing and duplicating, maintaining files, etc. All these clerical activities constitute office services and are performed in the office. Thus, the term **'office' can be defined as any place where records are prepared, handled and preserved for future reference, and making them available as and when requii ed.** Needless to mention here that it is the nature of work that is significant, and it is neither the place where it is done nor the persons who do it.

Scope of the Office Activities

Essentially, office work is concerned with collecting, processing and supplying information to business managers who need it for decision making. The relevant records must be prepared, preserved and made available to the right person at the right time and in the right form. Office activities connected with records management involve receiving various documents, copying and duplicating, filing papers, classification of files, preserving files and locating references quickly. Office work also includes processing and presenting numerical data in the form

of statements and reports, handling of inward and outward correspondence, and providing facilities for internal and external communication. Further, the office may be required to maintain and provide public relations through press releases and notifications, and to respond to public enquiries and complaints.

1.3 FUNCTIONS OF MODERN OFFICE

A modern office performs a variety of functions which may be classified as: (i) primary or basic functions and (ii) administrative/management functions. These are shown in Figure 1.1.

Let us discuss them in detail.

1.3.1 Primary Functions

The basic functions of the office include receiving, recording, arranging, analysing and giving information. The nature of these basic functions is described below:

1) **Receiving and Collecting Information:** In every organisation, be it a government or private one, information comes through letters, circulars, memos, orders, reports etc., from within and outside the organisation.

   a) **Internal Source:** Information from within the organisation may be received from various departments or executives in the form of letter, notes, memos, circulars, etc. and orders, instructions or messages over the telephone.

Figure 1.1: Functions of an Office

Functions of Modern Office
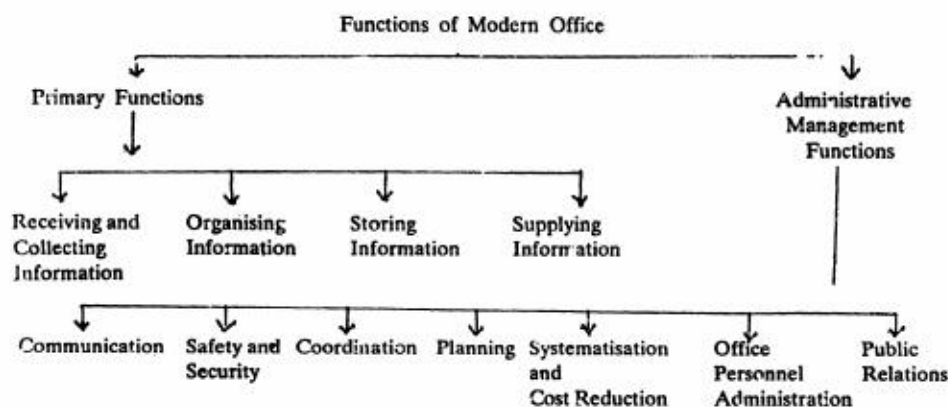
Notes addressed by some functional departments for the attention of other may also be received by the office. For example, the marketing department may send feedback information from consumers about a new product to the production department. Proposals for manufacturing a new product or about operating problems may be sent by the production manager to the managing director. The finance department may send a report to the managing director about the feasibility of raising capital. All such information may be received by the office to be used by top management for decision-making.

   b) **External Sources:** Information received from outside the organisation may originate from customers, suppliers, from government departments, financial institutions and banks, the general public and other organisations. Information may be received directly or from other departments through letters, enquiries, order invoices circulars, notices etc. The office may also collect information on its own initiative by sending out enquiries, questionnaires etc.

2) **Organising Information:** The office mostly receives information in raw or crude form. The information so received cannot be of any use to the managers, unless it is processed and presented in a suitable form. This is done by converting raw information into written records. The nature and format of the written record depends upon the importance of information. While organising

information, the task of the office comprises arrangement, summarising tabulation, and graphic presentation of data. Until recently, the entire process was carried out manually. Today with the availability of computer facilities large volumes of information and data can be processed by electric device and presented in a meaningful form as desired.

3) **Storing Information:** The recorded information accumulated in the office need to be preserved and maintained for future reference. The basic objective of preserving information is to make these available as and when required by management without delay. Various business laws like the Companies Act, Income Tax Act, etc., require that vital records must be maintained for a specified period of time. For all these purposes, the office may, thus, be regarded as 'Data Bank' to the organisation

4) **Supplying Information:** Information which has been collected, processed and recorded by the office must also be supplied to managers as and when required. Management decision making depends a great deal on the supply of accurate and timely information. Management may need information of a routine nature to be supplied by the office periodically, like statements of attendance, stock position, cash and bank balances, etc. The office may also be required to supply information of a special nature, eg. cost estimates of a job, credit information about a customer, outstanding dues of suppliers, etc.

1.3.2 Administrative Management Functions

1) **Communication:** Making arrangement for communication between different individuals within the organisation through intercom facility, meetings, etc. and between outsiders and the organisation through personal contact, telephones, letters, etc., is an important function performed by the office.

Through communication people are linked with the organisation to achieve specific objective. The office provides channels of communication which enables continuous flow of information with speed and accuracy. Office has to give due importance not only to the mode of communication (verbal or written) but also to the means (telephone, telex, ordinary mail, courier, etc.).

The communication system run by the office not only helps interaction between persons within an organisation and managers of the two or more organisations, but also enables transmission of policies, instruction and orders issued by the management for the guidance of various departments.

2) **Safety and Security:** The office has to keep in safe custody the records of the organisation and also make arrangements for security of properties and assets of the enterprise e.g. buildings, office machines, furniture, equipments, etc. The office is not only responsible for the safety of assets but also for their upkeep and maintenance. Adequate insurance cover should be provided for protecting the assets of the organisation against hazards of fire and theft.

3) **Coordination:** Coordination implies an orderly arrangement of group efforts to ensure unity of action in the realisation of common objectives. Office has to synchronise the efforts of individuals and departmental staff to ensure proper timing and sequence of activities so that the organisation objectives are fully realised. Office as a store-house of information, has to co-ordinate the activities of different departments so as to get the best results at a minimum cost.

4) **Planning:** Planning involves consideration of the factors influencing a situation and laying down a course of action leading to a particular goal. Effective performance of all office functions require advance planning. It has to be decided before hand, what is to be done, who is to do, how it will be done and when. Planning is necessary to avoid wastage and delay, and to reduce cost of operations.

5) **Systematisation and Cost Reduction:** With the adoption of scientific method in office administration, office must lay down systems, procedures and methods of performing various activities. Besides designing the systems and methods, the existing systems should be reviewed and modified, if necessary. It is only

through improvements, in systems, methods and procedures that the costs of office operation can be minimised. A separate department of the office known as Organisation & Methods (O & M) is generally encrusted with the responsibility of introducing new systems.

6) **Office Personnel Administration:** An efficient office is an invaluable asset to any organisation. Personnel employed in the office bring about efficiency of operation by the quality of their work. Office activities expand with the growth and development of business. To cope with the additional work in office more people are employed. To maintain efficiency and effectiveness it is necessary to select the right type of office personnel for various jobs, and arrange for their training. The staff in various positions should also be delegated with necessary authority. It is also essential that the progress of individual staff members should be watched regularly so as to evaluate their performance and evolve suitable methods of remuneration and incentives for better performance.

7) **Public Relations:** In its dealings with members of the public, the office projects the image of the organisation. Steps are required to be taken to build a good image of the organisation in the minds of the general public. Office should not only respond to all public enquiries promptly but also keep the management informed if there is a change in public opinion about the enterprise. On the other hand, the public must also be kept informed about the policies, programmes of the organisation with respect to matter of public interest.

1.4 IMPORTANCE OF OFFICE

You know that decision making is at the very core of managing business activity. Decisions are based on the foundation of information which is supplied by the office. With increasing volume of business operations and its complexity, no business can be managed today without the assistance of clerical services provided by the office. Office acts as a storehouse and fountain of information. A well organised office is an indispensible aid to management. It facilitates management to plan its operations effectively. It would not be an exaggeration to say that office is the real brain behind every activity of a business enterprise.

It is mainly on the basis of information supplied by the office that management formulates its policies and programmes, and evaluates the results of business. The quality of managerial decision is as good as the information upon which they are based. For example, if management has to make a decision on new investment for launching a new product, its decision must be based on accurate information supplied by the office.

By stretching the example, one can understand the importance of office. A decision to make additional investment ought to be based on such information as the estimated amount required, sources of finance cost, of capital, alternative investment proposals, etc. The office should provide the relevant information fully backed by data. After making the decision to invest, management would be interested in evaluating the results of the decisions. This evaluation can be possible again on the basis of information provided by the office. Thus, information is the core of decision-making and decision-making is the essence of management. An office not only provides all information on the basis of which decisions are made by management, it also provides the means of communication between different departments. This helps management to coordinate and direct the activities of different departments and persons working in the organisation. Thus, office act as the eyes and ears of management. The office is of vital importance in a modern business enterprise due to the following reasons:

1) It serves as a storehouse of information.

2) It provides necessary linkage between departments.

3) It aids management in decision-making.

4) It helps in co-ordinating activities.

5) It controls cost of operations.

6) It facilitates maintaining better relationship with (a) customers, (b) employees, (c) suppliers, (d) government agencies, (e) banks, etc.

IS office work productive?

While the importance of office is admitted, it may be asked whether the work done in an office is productive or not. For instance, is the work of a clerk making entries in books, a typist typing letters, or a messenger carrying messages from one person to another, productive? This is a question which is difficult to answer. If the work done by a messenger or typist is unproductive, why are they engaged in large numbers for doing such jobs. And if it is not so, then to argue that clerks are no-productive is wrong.

Comparison between manufacturing activity and office work may give the impression that a manufacturing department is productive but the office is not, because the former yields physical product, while no tangible product is made in the office. However to identify the real output of an office employee, we most look beyond the papers, i.e., at the overall achievements of the business enterprise, which could not have been possible without the clerical services provided by the office.

As a matter of fact, for years the office work was considered to be a necessary but not productive activity. Hence, the application of scientific principles and practices of management are applied in functional department, not considered essential for office services. Now, the situation has changed. With the increasing use of mod rn machines and application of scientific methods in office services, the work of office personnel handling papers, making plans, calculating costs, etc. are recognised as activities of real worth. In fach, before anything is produced in real terms, the same is produced on paper in office so as to ascertain the best and cheapest method of production. This reduces returns. Hence, we can say that office work is also productive indirectly if not directly.

Check Your Progress A

1) Which of the following statements are True and which are False?

    i)   Office work is concerned only with regards of management.

    ii)   Office work is essentially concerned with collecting, processing and supplying information.

    iii)   Records are maintained in the office for future reference.

    iv)   All office activities are of a routine nature.

    v)   Maintaining public relations is not a function of the office.

    vi)   Office services include provision of communication facilities.

    vii) Orally communicated messages are not taken seriously by the office.

    viii) Information is collected by the office always from primary sources.

2) Define 'office'.

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1.5 MODERN OFFICE ORGANISATION

Organising is the process of management by which activities of a group of persons are coordinated and responsibilities fixed. It is through organisation that managers blend human and material resources to achieve the goals of the enterprise. Organising office activities is a major aspect of office management.

A sound office organisation can contribute to the efficient working of an enterprise in the following manner.

1) Office organisation provides the framework which enables the office to carry out its primary and secondary functions effectively. It involves integrating various jobs into an operating system through well-defined superior-subordinate relationships, and delegation of authority and fixing responsibility of the office staff.

2) It stimulates initiative and creativity among office employees.

3) It ensures optimum use of men, machines and equipment.

4) It provides opportunities of advancement of the office work.

1.5.1 Definition of Office Organisation

Organisation is a process by which the activities of a group of persons are coordinated to achieve desired goals. When one talks of office organisation, it simply means a structural framework within which, and by means of which, the process of getting work can be effectively carried out. It is through the process of organising that the duties of office employees are determined and assigned, and responsibilities fixed so that the work may be performed with speed, accuracy and economy. Office organisation may, thus, be defined as the process by which a structural framework of positions is welded together in the office for the pursuit of the desired goals.

1.5.2 Principles of Office Organisation

Principles of organisation formulated by management experts are also applicable to office organisation, as mentioned below. A thorough understanding of the principles is essential for organising a good efficient office. The principles which govern office organisation are outlined below:

1) **Principle of objective:** Organising requires clear definition of the objectives to be attained. Clarity of objective leaves no scope for confusion and allows everyone to direct his or her effort towards achieving objectives. The main objective of the office may be to provide information to the right person, at the right time, and in the right manner at minimum cost. The organisation structure must be so designed as to achieve the stated objective.

2) **Principle of division of labour:** To achieve the objectives set specialised office functions need to be performed by the staff efficiently. For that purpose division of work is essential, that is, the total activity must be divided into jobs and tasks. Also units and sub-units of activities should be so defined that these may be grouped as departmental or individual activities.

3) **Principle of unity of function:** The sub-divided activities of a function in an enterprise must work in perfect harmony to achieve the objective. The major functions of office are making, storing and retrieval of records, and passing on information as and when required. All other functions to be carried out in course of performing the main function must also be linked with one another for harmonious effect.

4) **Principle of simplicity:** The organisation structure should be simple and easily understood by one and all in the organisation.

5) **Principle of span of control:** For effective supervision, the number of subordinates who work under an immediate supervisor should be limited. For determining the number, that is the span of control, each situation and activity should be carefully analysed. However, nature of work and capability of the supervisor to a large extent determine the span of control.

6) **Principle of parity of authority and responsibility:** This principle simply states that every person in the office must have necessary authority to do the job, for which he is assigned responsibility. For example, if a clerk is responsible for maintaining records, he should also have authority to ask for necessary folders etc.

7) **Principle of flexibility:** The organisation structure should be such that it may be easily adopted to changes in the nature of business and technical aspects of the work situation.

8) **Principle of efficiency:** Office organisation should achieve goals at minimum cost, which is the real test of efficiency. The structural design should be such that higher level of efficiency may be achieved by individuals; and by groups.

9) **Principle of initiative:** The structure of organisation and the superior-subordinate relations should provide for employees taking initiative for efficient performance of the jobs entrusted to them. In other words, subordinates should not be made to feel dependent on the superiors' orders and instructions so as to give up independent thinking.

10) **Principle of continuity:** The organisational design should ensure continuity and growth of the enterprise. This can be achieved if the structure of office organisation permits review of objectives, readjustment of plans and provides opportunities for development of future staff.

11) **Principle of coordination:** This principle suggests that the office manager should be able to coordinate activities of different functional departments with a view to achieve the given goals.

1.5.3 Steps in Office Organisation

The following steps are considered useful while designing the office organisation:

1) Establishment of office objectives.

2) Linking office objectives with organisational objectives.

3) Formulating plans, policies, procedures, methods.

4) Defining the nature of activities to be performed.

5) Sub-division of the activities into units and sub-units.

6) Evaluation of the activities and grouping the same into sections or departments.

7) Granting authority and fixing responsibility.

8) Preparation of a chart of organisation structure indicating the positions to be held by staff, and their relationships.

1.5.4 Organisation Chart

An organisation chart is a diagram which indicates the positions in the organisation, and depicts the relationship between individuals and different departments. It enables one to have a clear picture of who is what in the organisation, what are his functions, to whom he is responsible and who is reponsible to him?

Figure 1.2: Office Organisation Structure based on geographical location of branches

Head Office/Central Office
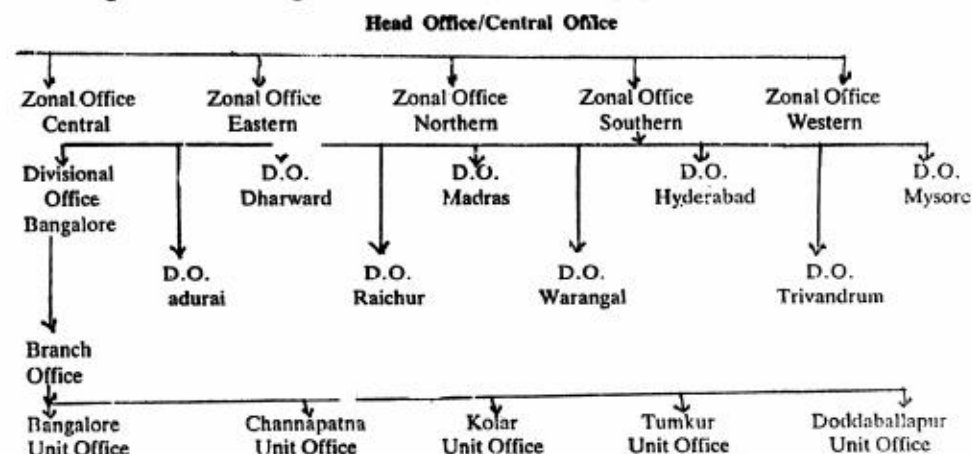
Designed on the basis of Office Services, the structure of organistion is shown in the following chart:

In order to combine and coordinate the efforts of people working at different levels in the organisation, proper relationship between them in terms of authority and responsibility should be set up through the structure of organisation. Office organisation can be designed on the basis of either (a) The geographical location of offices, or (b) Services rendered by office. Organisation having a large number of branch offices generally adopt the geographical basis of designing the organisation structure. The organisational charts based on geographical location of branches and services are shown in Figure 1.2 & 1.3 respectively.

Figure 1.3: Office Organisation Chart drawn on the basis of service

G.M.
Central, Office

| Manager Duplicating Service | Manager Typing Service | Manager Filing Service | Manager Estates | Manager Systems |

| Manager Maintenance Service | Manager Communications Service | Manager Public Service | Manager Supplies Service |

1.6 NATURE OF OFFICE SERVICES

Office activities strictly speaking do not constitute a separate function. They are part of the major functions of enterprise, like production, marketing, personnel, etc., and therefore, may be carried on in the functional departments themselves. However, services common to all the departments are usually carried out under one roof called "Central Office" or "Head Office"
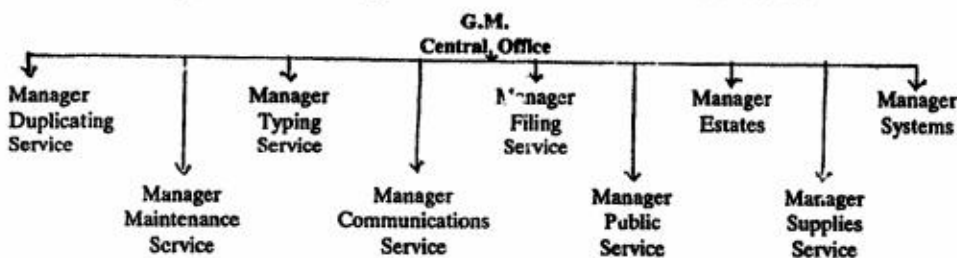
The types of common services rendered by the office are listed below:

1) Typing and duplicating service
2) Stenography service
3) Mailing service
4) Filing service
5) Stationery and supplies service
6) Communication service
7) Public relation service
8) Maintenance service
9) Library service
10) Estate service
11) Security service
12) Hospitality service

It is obvious that the services which the office renders involve engagement of persons to ensure smooth and efficient performance of various organisational functions. With the growth of business activities, there has been a corresponding increase in the volume of transactions. Besides, with technological innovations in the field of office work and environment, and the requirements of various laws of the land, the nature and scope of office services also have enlarged.

A modern office will have to face new challenges in future. Due to the rapid growth of industrial enterprises, massive data and information have to be gathered, recorded, analysed, stored and supplied.

Challenges due to mechanisation and automation along with the use of accounting machines, computers, photocopying machines and sophisticated filing equipments, etc., will have to be met with due preparedness. The ever increasing number of government rules and gulations is also likely to add to office responsibilites in future. Above all, the necessity of keeping office expenditure at a minimum will naturally pose a real challenge at all times.

While responding to the challenges it would be necessary for the office to (a) improve upon the existing information systems, (b) establish better information standards, (c) reduce the amount of paper work, (d) encourage creative thinking

with respect to records management, (e) improve and maintain public relations, (f) attract, acquire and retain efficient personnel, and (g) endeavour constantly for low cost efficient office service.

1.7 DECENTRALISATION AND CENTRALISATION OF OFFICE SERVICES

It has been mentioned earlier that certain common service required by the functional department of a business are provided by the office. If the relevant office activities are carried out at one place or performed under one roof the services are said to be 'centralised'. On the other hand when office activities are performed in the respective functional departments, the office services are said to be 'decentralised.'

Let us discuss them in detail.

1.7.1 Decentralisation

Decentralisation implies location of office activities in different functional departments. It refers to departmentation of office services that is dispersal of activities in different departments.

Merits: Decentralisation of office activities is beneficial in the following ways:

i)   Secrecy of business affairs can be ensured if records are handled and filed on the department dealing with the matters.

ii) Greater efficiency output and lower cost can be achieved due to special knowledge of the departmental staff about the papers handled. Since the employees are better informed and conversant with the technicalities of the work of the department, they can perform office jobs more efficiently.

Demerits: However, decentralisation entails the following disadvantages also:

i)   Duplication of work cannot be avoided.

ii) Standardisation of office system, procedures, methods and equipments is not possible.

iii) It may create problems of coordination of work between different departments.

iv) Office work may not be evenly distributed between employees in different departments.

1.7.2 Centralisation

Office services needed by the functional departments may be pooled and administered by a 'central office'. Thus, centralisation of office activities implies pooling of common services at a central place with a qualified and experienced office manager in charge. The functional departments are left free to attend to their own specialised operations. Even when business activity is confined to a single location, it is possible to centralise the bulk of clerical work under a capable office manager having overall responsibility.

Merits: The following are the major benefits of centralisation:

i)   **Relief to functional heads:** The heads of departments are relieved of the supervising office work and thus they can concentrate on the technical work of the departments.

ii) **Specialisation:** Office employees can develop specialised skills and become more efficient being engaged in performing tasks most suited to their capability.

iii) **Flexibility:** Centralisation of office work provides of flexibility of operations. If at any time there is extra work, it can be handled conveniently by the existing staff. This also ensures maximum utilisation of the capacity of office machinery.

iv) **Minimum cost:** Investment in machines and the cost of their maintenance are considerably reduced. Centralisation enables standardisation of office procedures which further bring down costs.

v) **Equitable distribution of work load:** When office activities are performed in each department, there may be heavy work load in some departments, and not enough work in certain departments, for the clerical staff. In a centralised organisation the total work involved can be equally distributed among different categories of staff.

Demerits: Centralisation of office service has also certain limitations which are outlined below:

i) **Delay in the performance of work:** Office work may not be performed according to the urgency or importance of departmental needs. This is because, work in the 'Central Office' is generally performed in the order in which papers are received rather than in the order of their importance.

ii) **Secrecy may not be maintained:** Secrecy of documents and other confidential records cannot be ensured with centralised office services.

Both centralisation and decentralisation have their respective merits and demerits. Wnce deciding whether centralisation or decentralisation is preferable, take into consideration the nature of business and its organisation structure, cost of office services, and the objectives in view.

Check Your Progress B

1) Fill in the blanks

i) Organising is a................by which duties are assigned and responsibilities fixed.

ii) The number of subordinates working under a supervisor is known as ....

iii) Organisation chart is a .... which depicts the .... of organisation.

iv) .... implies pooling of all office services at one place.

2) Which of the following statements are True or False.

i) Centralisation office work provides greater flexibility of operation than decentralisation.

ii) There is equitable distribution of work load if office services are decentralised.

iii) The principle of parity requires that authority and responsibility should be equally divided between the superior and subordinate.

iv) Organisation structure should be consistent with the objectives.

v) Office jobs can be performed more intelligently by departmental clerks.

1.8 OFFICE MANAGEMENT

Increasing dependence of management on information in modern times is the reason for growth of office functions. To satisfy this demand with skill and efficiency at minimum cost it is necessary to provide for an effective system of office management and organisation

The basic objective of the office is to provide clerical services to all other departments in the organisation. The office undertakes functions which involve receiving, recording, analysing, storing and communicating information, and other administrative functions.

Office activity are carried on by a group of people for a common objective, that of providing certain services efficiently. Office management is concerned with the application of the principles and practices of management for getting office work

performed by the office personnel. Thus, it includes planning, organising, coordinating and controlling of office activities. It is the function of office management to guide the personnel employed in using appropriate means, and methods to perform office services. Thus office management may be defined as "that branch of the art and science of management which is concerned with the efficient performance of office work whenever and wherever that work is done"

1.8.1 Elements of Office Management

The following constitute the elements of office management:

Objectives: Office management is concerned with the attainment of certain desired objectives, through and with the cooperation of office staff. Office objectives can be classified as service, profit and social responsibilities. Office work is expected to assist and help other functional departments in performing their work efficiently. Therefore, service is an important objective of managing office work. Performance of office work efficiently contributes to work and profitability. Social responsibilities stress the attainment of goals in accordance with certain moral and ethical codes laid down by the industry and society in which the enterprise operates.

Means: The methods which are adopted to achieve the desired objectives are called the means. The office manager must use the most suitable materials, and standard equipments, required for the performance of work by the office staff. This requires full information about nature of office machines and equipments available and their application in day to day office work.

Personnel: Well-trained personnel is required to perform various office activities. Office machines cannot completely replace human effort, but can only help the office staff in doing their work accurately and quickly.

Recruitment, training, and placement of office employees and their motivation constitute an important element of office management.

Environment: Office environment plays a major role in the performance of office work by its staff. Office personnel spend best part of their i.e in working for the organisation. The surroundings in which office employees work must be congenial. Proper lighting, ventilation, colouring of walls, and availability of other common facilities ensure better atmosphere for work.

1.8.2 Major Processes of Office Management

Let us now have bird's eye view of major functions or processes of office management. There are five basic functions involved in the management of any office. They are:

1) **Planning:** It is mental exercise requiring use of imagination, foresight, and sound judgement in determining what, when, where, how and by whom the activities are to be carried out. Planning is nothing but laying down a course of action to realise goals. Planning of office functions involves taking decisions with regard to factors affecting office work. While short-term planning involves arrangement of office functions to cope with the current situation, the long-range planning includes foreseeing future requirements of the office, such as space, layout, computer application, human resource planning, etc.

    Office planning requires (i) Setting objectives, (ii) Formulating policies and programmes, (iii) Laying down procedures.

    i) **Objectives:** Planning has no meaning without being related to objectives. The main objectives of the office are: (1) to supply right information to the right persons at right time and at the minimum cost, and (2) to provide efficient clerical service to the functional departments.

    ii **Policies and Programmes:** Policies are guide to administrative action. Well drawn policies and programmes go a long way in ensuring smooth functioning of office activities. Thus, statements of promotion policy, training policy, etc. enable office employees to work harmoniously with minimum conflict.

A programme refers to the sequences of activities which are required to implement policies.

iii) **Procedures:** A procedure or routine refers to the series of steps to be taken to complete a particular office work. It is a planned sequence of operations for handling a recurring office activity uniformally and consistantly. In most offices a manual is prepared which contains procedures laid down for major office activities. The manual serves as a guide to the employees and ensures uniformity of working.

2) **Organising:** The organising function involves setting up of departments, preparing job descriptions, designing the organisation structure with necessary authority and responsibility for each position, and establishing a proper communication system. Providing necessary equipments and furniture for office work is also a part of the organising function.

3) **Staffing:** The staffing function relates to personnel matters. Right type of people are to be employed to man various positions. For this purpose, suitable personnel must be recruited and provision made for their training for specific jobs. Individuals selected for particular jobs must also be informed about their duties and responsibilities.

4) **Directing and Coordinating:** Directing includes several sub functions: Issue of orders and instructions to subordinates, guiding them at work, supervision of day to day operations, and motivating people for better performance. Coordinating refers to the orderly arrangement of individual and group efforts so as to secure harmony of different activities. It involves vn l i .ation of different operations and efforts of individuals and groups with regard to the pace, timing and sequence of work so that the lanned objectives may be achieved without delay and interruptions.

5) **Controlling:** Plans, policies and programmes cannot be effective unless there is a control mechanism to guide and direct the execution of work. To control the implementation of planned work, the following steps are required to be taken: (a) establish norms or standards of work, (b) record actual performance (c) compare actual performance with the standards set and (d) adopt corrective measures where necessary. Control basically refers to evaluation and rectification of performance of subordinates in order to ensure the achievement of planned results.

1.9 DEPARTMENTATION OF OFFICE

In modern times, office work consists of diverse activities required to be carried out on a large scale. For efficient performance of operations, the activities are divided into various categories of functions; each classified function being performed by a group of employees as a 'department'. Different departments perform different functions and work in coordination with each other. Each department performs a specific function and the staff attached to it becomes specialised in that particular function by virtue of continuous handling of the same job.

It must be clearly understood here, that the number and importance of different departments in an office are not the same in an cases. It depends on the nature of business and the volume of work.

Let us now discuss various important departments of an office.

Cash Department: This department mainly deals revenue income and expenditure of the entire business Cash department is headed by a cashier who organises the work of the department. He is responsible for safe custody of cash, banks transaction, maintenance of cash book and payment against proper vouc crs olisetc

Legal Department: This department is headed by a legal expert. The department is to render legal advice to all other functional departments. Matters reraing to law suits, disputes before tribunal, are looked after by this department.

Filing Department: The main job of the filing department is to maintain records of the organisation for future reference. The filing department is responsible for storing, file movement, and also the safe custody of records and documents. If records are maintained properly, the requisite information can be traced and passed on without loss of time to the person who requires such information.

Mailing Department: All written communication which may be despatched or received pass through the mailing department. It collects all written communications and passes on the same to various functional departments, and takes such steps as are required to despatch letters from the organisation. The person incharge of this department must be familiar with the latest postal rules and regulations.

Communication Department: This department provides for internal and external communication facilities for which intercom, external telephone, telex, FAX etc. are some of the most effective means used.

Duplicating Department: Multiple copies of letters, circulars, notices, etc. are often required to be made out in the office to disseminate information or data among managers of different departments or to communicate with customers, dealers, and other parties. Photo-copying machines are now widely used in offices to take out multi-copies.

Stationery Supply Department: Office personnel require stationery, like pen, pencil, paper, pin, ink, rubber etc. in their day to day work. This department ensures continuous supply of stationery items, makes purchases, issues items of stationery on requisition by staff, and maintains sufficient stock of the same.

Maintenance Department: The maintenance department is to ensure that office machine and equipment are serviced regularly and repaired whenever necessary without disturbing normal office work. A schedule of preventive maintenence is generally drawn up to secure continuity of use.

Security **Department:** The responsibility of this department is to proviceiou safety and security of the properties and asses of the organisation it ensures tnat durable assets and other valuables are insured againse loss cup entrprises etc ans

Relationship with other Department: The office undertakes certain important activities to assist the production and distribution functions of business enterprises. Business operations are carried out through various functional departments, viz. purchases, marketing; sales, or finance, production, advertising, personnel, etc. In large organisations, a section officer is attached to each of the major department to provide clerical services.

Certain common services like typing and duplication, filing and mailing may be provided by the "central office" or "head office" which also coordinates the activities of other functional departments of the organisation. For coordinating the activities of different departments, the central office maintains close links with every other department. The office cannot remain isolated from the functional departments as the main purpose of office is to provide clerical services to all other departments and facilitate their functioning.

Let us exarta i how the office is related with the functional departments of a business firm.

i)   **Office and Production Department:** Production of goods and services is the main concern of the production department. Continuous prodution requires full and complete information about procurement and availability of raw materials, maintenance schedule of machines and equipments, order booked and despatches taking place. It is the office which processes and provides the required information and helps the production manager in making timely decisions. Information provided by the office about alternative sources of raw materials, vendor analysis, prices prevailing in various markets, and other relevant matters, enable the production department to minimise manufacturing costs

ii) **Office and Purchase Department:** Purchase department is responsible for making all purchases of the organisation. Preparation of indent, inviting

tenders, making out purchase orders, arranging inspection of goods supplied, approving payment to vendors and related activities for purchase of materials and other store items are carried out by the purchase department.

iii) **Office and Accounts Department:** Accounts department is mainly concerned with keeping accounting records and preparing annual financial statements for onward transmission to top management government and shareholders. The office helps maintenance of books of accounts and preparation of financial statements, necessary papers, vouchers, bills and other documents for the purpose.

1.10 OFFICE MANAGER

A manager is a person who works with men, materials and machines to achieve some specific objectives. A person who is incharge of an office is known as office manager. He not only supervises the office work but also organises and controls all the office activities. The functions of an office manager vary from orgnisation to organisation depending on the volume and nature of business activity. In a small organisation office could be a one man show. He may carry out all office activities e.g. typing, filing and despatching, however, in a big organisation he performs managerial functions which involve getting work done through and with the cooperation of office staff.

1.10.1 Functions of Office Manager

1) As mentioned earlier office work is basically a service function. The office manager, therefore, has to plan activities, and decide who should perform what and when. Office activities must be planned and organised in such a manner that the service function is performed efficiently and economically.

2) As business expands, the volume of office work also increases. This invariably requires decision to be taken with regard to location of the office premises and its layout. Designing and setting up effective systems and procedures for handling office operation also depend on the office manager's judgement.

3) For a large organisation, office services require employment of people having necessary skill and abilities for different types of office jobs. Besides recruiting office personnel, the office manager has to provide for their training as well.

4) Choice of suitable furniture, equipments and machines for the office requires consideration of the office manager from the point of view of their usefulness, costs and benefits expected to be derived.

5) The office manager is responsible for providing a congenial working environment to his staff to enable them contribute their best efforts while discharging assigned duties. Proper ventilation and lighting, adequate moving space and provision of rest rooms, etc. are essential pre-requisites of a good office environment.

6) Organisation and maintenance of the communication system is another important function of an office manager. Modern intercom facilities and private automatic telephone exchanges are widely used in modern offices. Telex and Fax can also be used for quick transmission of information to distant places.

7) Coordination and control of different office activities, correspondence, typing, duplicating, filing, data processing, etc. constitute the most vital functions of the office manager, which ensure smooth and efficient running of the office routines.

1.10.2 Qualifications of Office Manager

Like any other functional manager the office manager must also possess requisite qualifications to manage office activities successfully. The following are some of the more important qualification, which the office manager should possess:

1) **Education and training:** The office manager must have a sound educational background. He should be able to communicate well with his superiors,

subordinates and the general public. He should have an analytical mind and capability of resolving problems. Special training *in business administration*, accounting and office management are desirable qualifications for the office manager. He must be capable of taking decisions by himself *when the situation* so demands. Training and work experience brings maturity. Both are invaluable for the success of an office manager.

2) **Personal qualities:** In addition to having sound educational qualification and special training, the office manager must possess certain personal qualities. Self-control, sincerity, adptability, tact and persuasiveness, are some of the qualities that an office manager should possess. The total personality of the office manager *should be such that he may* be able to maintain discipline and harmony among the staff giving them a sense of fairplay and firmness.

3) **Leadership qualities:** Office manager must have leadership qualities, *that is the* ability to enthuse, to inspire and to lead and guide subordinates. He should be in a position to get the best out of his staff. Through leadership the office manager can mould people working under him into a unified team dedicated to the achievement of the general goal of the organisation.

4) **Experience:** Education and *training alone are not enough* for an office manager to be sucessful in his job. He must have practical experience in the field of personnel management and *general management. With business* experience, he may find it easier to get acquainted with the organisation activities and tackle problems which may arise in the office.

1.10.3 Status of Office Manager

In this complex and everchanging business environment of modern times, the scope of office manager's responsibilities has undergone a sea change. Technological changes in the working of systems and procedures, and the emphasis on human relations have also transformed the nature and scope of office manager's role. The office manager is basically a staff executive since office work is primarily concerned with service functions which are highly specialised and require a specialist to manage the same.

The *status of office* manager is like that of a line manager, with respect to the common services provided by the general office equally and efficiently to various other functional departments. He exercises direct control over the staff and activities of the office. But with regard to clerical work performed separately in the functional departments, the manager in charge of the general office performs an 'advisory' role. Hence, his status is similar to that of a 'staff officer'. Thus, the office manager may be said to have a dual role, that of a 'line executive' and of a 'staff officer'.

The significance of office services and the role of office manager are *widely* recognised in modern business enterprises. The heads of functional departments and the office manager enjoy equal status in the organisational structure of the business. This is because of the immense value of the information made available by the office to top management for effective control of the enterprise. The assistance of office managers, in decision-making has even prompted the top-management of some organisations to seek the presence of office manager at Board meetings.

Check Your Progress C

1) State the four elements of Office Management.

   i) .... ii) ....

   iii) .... iv) ....

2) Which of the following statements are True and which are False?

   i) Coordination ensures harmony of activities.

   ii) The production department must be located in the same building as the general office.

iii) Besides rendering clerical services, the office also controls the activities of the various functional departments.

iv) The office acts as a clearing house of the accounts department.

v) Recruitment of office staff is the responsibility of top management.

1.11 LET US SUM UP

The office may be defined as any place where records are prepared, handled and preserved for future references and making them available as and when required. The functions of a modern office may be broadly classified as (i) Primary or Basic functions and (ii) Administrative management functions. The primary functions are: (i) receiving and collecting information from internal and external sources, (ii) organising information, (iii) supplying information. Administrative management functions include communication, safety and security, coordination, planning systematisation and cost reduction, office personnel administration and public relations. A well organised office is an indispensable aid to management as the policies and programmes formulated by the management are based on the information supplied by the office. The office organisation is governed by unity of function, simplicity, flexibility, efficiency, initiative, continuity and coordination. The design of office organisation may be based on either the geographical location of offices, or the services rendered by the office.

The types of common services rendered by the office to other departments are typing and duplication, stenography, stationery, mailing, filing, and supplies, communication, public relations, filing maintenance, library estate, security and hospitality.

If office activities relating to the services required by the functional departments are carried out at one place or performed under one roof, the services are said to be centralised. On the other hand, when office activities are performed in the respective functional departments, the services are said to be decentralised. Both centralisation and decentralisation have certain merits as well as demerits.

Office management is concerned with the application of the principles and practices of management for getting office work performed by the office personnel. The main elements of office management are: objectives, means and methods, personnel and environment. The major process of functions of office management include: planning, organising, staffing, directing, coordinating, and controlling.

Departmentalisation of office is necessitated by the diverse nature of office activities required to be carried out on a large scale in modern offices. For efficient operation, office activities are divided into two categories of functions, each function being performed by a group of employees as a 'department'. Separate department or sections usually are related with cash transactions, legal matter, filing, mailing, communication, duplication, stationery and supplies, maintenance and security.

The central office provides certain common services to the functional departments. It also coordinates their activities to maintain close links with all departments. The functions of the office manager include: organisation of office activities, making decisions on location and layout of the office premises, selection and training of office staff, choice of furniture, equipments and machines, coordination and control of day to day operations, providing a proper working environments, designing systems and procedures, organisation and maintenance of the communication system. The qualities of an office manager must possess are: sound educational background with ability to communicate well, special training in business administration, accounting and office management, personal qualities of self- control, sincerity, adaptability, tact and persuasiveness, impressive personality, leadership, and experience of general management. The status of the office manager is like that of a 'line' manager with respect to the common services provided by the general office to other functional departments.

1.12 KEY WORDS

Office: Any place where records are prepared, handled and preserved for future reference.

Organisation: A structure establishing relationships designed to accomplish desired objective by delegation of authority.

Communication: Exchange of ideas and thoughts between persons.

Centralisation: Activities carried out in one department and at one place.

Decentralisation: Activities carried out separately in different departments.

Departmentation: Grouping of similar activities to form functional departments.

1.13 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress A

1) i) Wrong   ii) Right   iii) Right   iv) Wrong
   v) Wrong   vi) Right   vii) Wrong   viii) Wrong

Check Your Progress B

1) i) Process   ii) Span of control
   iii) Diagram, Structure   iv) Centralisation
2) i) Right   ii) Wrong   iii) Wrong
   iv) Right   v) Right

Check Your Progress C

2) i) Right   ii) Wrong   iii) Wrong
   iv) Right   v) Wrong

1.14 TERMINAL QUESTIONS

1) What is an office? Discuss its importance in business house.

2) Discuss the various functions of an office. What steps you will take while organising an office?

3) Why is departmentation of office necessary? Bring out clearly the relationship of office with sales and production departments.

4) What do you mean by office management? What are the elements of office management?

5) Describe the principles you will keep in view while organising office activities.

6) What do you mean by centralisation and decentralisation of office services? Bring out the merits and demerits of both.

7) Bring out clearly the functions of an office manager. What in your opinion should be the essential qualifications of an office manager?

8) "Office work is unproductive." Do you agree with the statement? Give reasons.

9) Write notes on (a) Office manager, (b) Organisation chart, (c) Decentralisation, (d) Office objectives.

10) Explain the challenges before office managers.

> **Note:** These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University for assessment. These are for your practice only.

UNIT 2 ADMINISTRATIVE ARRANGEMENT AND FACILITIES

Structure

2.0 OBJECTIVES

After studying this unit, you should be able to:

- explain the importance of office accommodation
- analyse the suitability of owned and hired accommodation
- outline the factors affecting office location
- describe the advantages of a good office lay-out
- outline the features of open office and private office

2.1 INTRODUCTION

In the preceding unit you have learnt about the meaning of office, scope of office activities, the importance of office, its functions, principles, governing office, organisation, and major processes of office management. In modern business enterprises the office manager is invariably concerned about providing employees with congenial working conditions, modern machines and suitable accommodation so as to secure maximum efficiency of work at minimum cost. In this unit you will learn about the administrative arrangements necessary in office work, especially office accommodation and its layout.

2.2 OFFICE ACCOMMODATION AND ITS IMPORTANCE

Every office manager constantly aims at getting work done by the office staff as efficiently and economically as possible. For this purpose, he may have the best possible personnel at his command and the best equipments for them. Even then work efficiency may be due to lack of proper environment. Unless office employees are provided with suitable physical accommodation and congenial work environment, they cannot be expected to work with full physical and mental vigour. On the other hand, they are bound to be more involved in work and perform more efficiently if they have proper working condition including adequate space for work and other facilities.

The importance of accommodation should be recognised particularly because office employees spend the best part of their day working in the office and are engaged in mental work which is repetitive in nature and monotonous. Office activity also requires greater concentration of mind. Besides, over crowding and limited space for movement invariably produce unhygienic conditions besides causing unnecessary wastage of time in movement. It is, therefore, essential to provide suitable and adequate accommodation for office personnel. It involves consideration of the following aspects of office space:

1) Locating the office building

2) Securing adequate office accommodation

3) Office layout

4) Working facilities

5) Cost of office accommodation

Let us now take them up one by one.

2.3 LOCATION OF OFFICE

Generally the office manager does not have to face the problem of selecting the location of office. However, if he is required to decide on the question of suitability of location, he should give careful consideration to the following factors:

1) When all the functional departments of the firm are located in one place, the office can best serve the business if it is situated in the same location. Where the functional departments are located at different places, the office should be located in the premises of that function which is served most by the office.

2) When the number of office employees is small, office can be located in the same building where all other departments operate. As the number of office personnel increases and it is desired to provide common services to all departments of the organisation, it should be located in a separate building.

3) Whether the office is located in the same building or in a separate building, it should be ensured that:

   a) sufficient floor space is available for each worker

   b) facilities exist for fresh air, water, and power supply

   c) there are transport, banking, telephone, postal services available in the locality

   d) there is scope for alteration, if required in future.

2.3.1 Choice of Location: Urban vs Suburban

The location of office should be at a suitable place so as to be convenient for office employees to commute from their residence and for customers and other parties to visit the office easiest. Unsuitable location may result in wastage of time and money and can be inconvenience to the office personnel and those dealing with the office.

The office manager has two options in the matter of office location. One option is to locate the office within the city area and the second option is to locate it in a suburban area. Many industrial concerns in a country are moving away from cities and locating offices in suburban areas for the following reasons:

a) high cost and rent of buildings

b) overcrowding

c) Govt policy of dispersal of industries, and

d) diversification and expansion of industrial activity.

However, there is also stress for locating office in metropolitan towns and state capitals. Very soon office managers may have to look for suburban areas only for locating office due to high cost of acquiring office space in cities.

Thus, a major decision which the office manager may have to take is whether the location of office should be in an urban area or in a suburban area. Commercial organisations like banks, finance companies, leasing companies, transport and insurance companies usually prefer to a central location in a big city.

Advantages of Urban Location: Locating the office in an urban area provides the following advantages:

i) Existence of commercial infrastructure

ii) Availability of well developed communication and transport facilities

iii) Easy access to customers

iv) Accessibility to related trades

v) Easy availability of office personnel

vi) Prestige value

Disadvantages: As against the above mentioned advantages, urban location suffers from the following drawbacks:

i) Environmental pollution

ii) Interruption in work caused by failure of power supply, and faults in telephone lines

iii) Traffic congestion and area crowding

iv) Non-availability of sufficient space

v) High cost of land and building

vi) Frequent labour problems

vii) Higher operational costs.

Advantages of Suburban Location: Locating the office in suburban area offers the following advantages:

i) Cost of land and building is relatively lower

ii) Congestion and overcrowding are less

iii) Availability of space and scope for expansion

iv) Lower operational cost

v) Better environmentless pollution

vi) Minimum labour problem.

Disadvantages: Suburban location of office has the following drawbacks:

i) Office employees may not find it convenient

ii) Lack of service facilities

iii) Difficulty of customers

iv) Lack of communication and transport facilities

v) Suburban environment may cause health problems.

To arrive at a decision the office manager has to strike a balance between merits and demerits of locating office in urban and suburban locations. In the ultimate analysis the cost factor and preference of top management influences the choice. Optimum location is one which gives the maximum advantages at the lowest possible cost. Hence the office manager should select that location where various costs will be minimum and the efficiency of office staff will be the highest.

2.3.2 Factors to be Considered in Selecting the Site

Having decided the question of location, the office manager has to select the best site or situation of the office building. The following factors should be taken into account deciding above situation of office building:

1) Close proximity of the office to other units (factory, warehouse, etc.) of the enterprise.

2) Availability of various service facilities

3) Availability of means of transport and communication

4) Suitability of neighbourhood

5) Sufficient space availability

6) *Cost consideration*

7) Publicity value of building

8) Lighting and ventilation.

Let us now discuss these factors in detail.

Close proximity of the office to other units of the enterprise: It is worthwhile to have the office building located in close proximity to the departments served by it. Such a location proves to be beneficial due to saving of time of communication between the office and different units of the organisation, better parking facilities, better public relations and better personnel servicing.

Availability of various service facilities: The office building should be located at a site where amenities like canteen, retail stores, banks, post office, public park and similar facilities are available nearby for the use of not only office employees but also the organisation.

Availability of means of transport: Location of office building near a bus terminal, or railway station, may be convenient in different ways. It would facilitate. staff as well as customers and other parties to easily reach the office. In Delhi, for example, areas like Connaught Circus, Nehru Place, Rajendra Place, etc. are very well connected by bus/rail services. Hence, the offices should be located in these areas.

Suitability of neighbourhood: Location of office building is not desirable in a congested residential area where polluted air, noise, and dirt, etc. disturb smooth working and has adverse effect on the health and efficiency of office employees. A congenial neighbourhood is always preferable for locating the office.

Availability of adequate space: Adequate space for the office staff and equipment should be provided for efficient performance of work. The office building should have sufficient space not only for the present requirements but also for future expansion. However, it is desirable to avoid unnecessary space for future needs which may remain unutilised.

Cost considerations: Cost of procuring and maintaining office space consideration to be kept in view. If the building is located in a busy commercial area, the cost of acquiring office is likely to be very high. Indeed it is the cost factor which ultimately determine the choice of location. The cost of space should' be within the means of the business, at the same time, efficiency should not be sacrificed.

Publicity value of the building: The building decided to house office activity should look impressive enough to have a publicity value. Extensive appearance and internal decorations impress visitors and customers and also enhance the reputation of the employees who work in that building.

Lighting and ventilation: A well lighted and ventilated office accommodation minimises physical and mental strain on personnel. Free blow of fresh air, and natural light not only increase efficiency but also keep morale of the staff high. Besides the above considerations, the office manager will have to keep in view certain economic and engineering implications of locating office at a particular site. Final selection, however, is made only after carefully weighing the impact of relevant factors on the overall performance and cost of office work.

2.4 SECURING OFFICE SPACE

Securing a proper building or space for the office is another problem which the office manager has to resolve. The space or building to be acquired should be of adequate size and proper design so as to suit the requirements. Before making enquiries about the availability of any building or space, the management must decide whether to construct their own building or get a building on rent. It may also be possible to take building on lease rather than hiring space.

Both the options have merits and demerits of their own. The respective merits and demerits of the options are examined below.

Construct a Building for the Office

Every organisation would like to have an office building of its own as it offers the following advantages:

i)   The building plan can be made in accordance with the present and possible future needs of space.

ii) A building may be constructed in a suitable location to avail of the existing advantages.

iii) Well designed office building owned by the organisation adds to the prestige of the business.

ivi) The space which is not currently required for use may be put to the advantages of the organisation.

In view of the advantages mentioned above, it may be desirable to construct own building. But it also involves certain drawbacks.

These are as follows:

i)   It may require investment of a huge amount.

ii) The maintenance cost of own building will increase operational costs.

iii) Actual construction may be time-consuming and cause delay in the availability of space for office work.

Alternatively, it may be decided to buy an existing building instead of constructing a new one. This may help in overcoming the problem of delay on account of time required for construction. A building may also be available at a bargain price and the amount required for initial investment may thus be less. Moreover, it obviates the problem of securing building space in a specific location which is otherwise found convenient. But an existing building on sale may not suit the exact requirements of the office to be set up. It may require additional investment to alterations in the existing structure.

Secure Building Space on Lease

The following advantages may be derived if accommodation is hired or taken on lease.

i)   There is no initial investment required for the purpose.

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ii) It is the most suitable arrangement for securing office space—where the cost of owning a building is beyond the means of the business firm.

iii) It suits the purpose of small or medium scale business for which the requirement for office space is limited.

iv) Whenever necessary and feasible, the office may be shifted to a more convenient location and for having more space.

v) The cost of maintenance is borne by the owner, hence the operational costs remain low.

The hired or leased office-space also suffers from certain drawbacks which are as follows:

i) It is difficult to secure accommodation on rent or lease exactly suited to requirements, or in the most suitable location.

ii) Space may partly be waste due to the design and plan of construction of the building taken on lease or rented.

iii) Leased or rented building cannot be altered to suit the requirements.

iv) There is no scope for expansion unless the office is shifted.

v) Shifting office requires change of address to be notified.

For ongoing enterprises, office space already available may prove to be inadequate in course of time. Till additional space can be arranged, steps may be taken with available space by changing the layout of equipments, by mechanisation, and introducing modern methods of filing, etc.

Own building is generally preferable in the case of large and well established business and where demand for the company's products or services is stable.

Whether it is decided to construct own building or secure office space on rent or lease, the following requirements should be kept in view:

1) Sufficient floor space for each employee.

2) Availability of fresh air, natural light, water, ventilation, etc.

3) Availability of service facilities like parking area, canteen, public telephone booth, lift in the premises and bank and post and telegraph offices nearby.

4) Scope for additions and alterations in the building.

5) Provision of safety and security for the protection of life and property against fire, theft, burglary etc.

Check Your Progress A

1) Which of the following statements are True and which are False?

i) Adequate office accommodation is essential to be provided as employees. wish to relax while at work.

ii) The office should always be located in the same building where the sales department is located.

iii) Suburban location of office implies lower operational cost.

iv) Own building for office accommodation is preferable in the case of large and well established business enterprises.

v) Urban location of office has the advantage of developed commercial infrastructure.

2) Mention the service facilities which should be available in the area selected for office location.

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2.5 OFFICE LAYOUT

After office accommodation has been secured the next important task before the office manager is the planning of office space. The objective of planning the utilisation of office space is to facilitate a continuous flow of work, locating equipment and office machines conveniently providing for effective supervision, congenial environment for work efficiency and visitors reception as well as having scope for rearrangement, if necessary. The basic purpose should be optimum utilisation of the available accommodation.

Office layout refers to the arrangement and placing of men, machines, furniture and equipments within each department of the office so as to have the best possible utilisation of available space. The objective is to utilise space for economy and efficiency in office work. Scientific office layout calls for a systematic arrangement of departments and sections, personnel, and equipments in accordance with a well defined and well thought art plan. The best utilisation of space is that which takes care of the special requirements of the organisation.

The modern tendency is to have large floor space relatively free of partitions so that layout can be rearranged according to changing needs of the time. In any case, office manager has to locate the departments in such a way that there is effective coordination of activities performed. Altnough the office is divided into a number of departments and sections to derive the benefits of specialisation, work performed by the employees in different departments are interrelated and interdependent. Similarly, the activities of different employees within a department itself are interrelated. It is needless to mention that physical set up in the office should be neat and impressive, for the visual impression that a visitor gets and has an impact on his dealings with the office.

2.5.1 Objectives of Office Lay-out

As mentioned earlier, the main objective of office layout is to secure economy and efficiency in office work. The more specific objectives of office layout are:

1) To provide maximum scope for supervision.

2) To ensure maximum utilisation of space.

3) To provide adequate privacy and safety to persons with confidential work.

4) To leave sufficient space for movement of men and use of machines.

5) To permit smooth flow of work.

6) To keep operational cost at a minimum.

Certain principles of layout may be followed to achieve these objectives. The tendency of department to spread out to fill available space even at the cost of inconvenience needs to be prevented. Due attention should also be given to the orderly appearance of the work place as it helps in achieving better employee morale.

2.5.2 Principles of Office Lay-out

The following principles have been develop 1 for the guidance of office manager designing the office layout:

Principle of inter-departmental relationship: Activities performed in some of the departments of the office are closely interrelated. These departments must be placed adjacent to each other. The general office ought to be central placed so that common services may be provided conveniently to various departments. Partitions and sound-proof walls should be put up to segregate departments using noisy machines like duplications, typewriter, etc. Public dealings which may

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involve attending to enquiries receipts and payments of cash, receiving mails, etc.
should be near the entrance to the office. Individuals and departments concerned
should be placed accordingly.

Principle of flow of work: Before preparing the layout plan, it is necessary to
study the flow of work in the office. The systems and procedures established for
various operations also need to be examined carefully. Whether the layout should
be a straight-line arrangement or U-shaped depends on the flow of work. As far
as possible flow of work should be continuous, smooth, straight, and without
backward movement.

Principle of maximum utilisation: Available space should be fully utilised. Adequate
space should be provided for each individual staff. About 30 sq. feet space is
required for each individual clerk in a department. Equipments and filing cabinets
should be placed in such a way that the staff may be able to approach them
without loss of time or inconvenience.

Principle of flexibility: Office layout should be so planned that additions to staff
and equipment needed to cope with increased volume of work in future may be
possible with little adjustment.

Principle of service facilities: While planning office layout adequate provision
should be made for service facilities for employees like telephone, canteen,
washrooms, lifts, drinking water, etc. These facilities are essential for efficiency
of work and are conducive to comfort and well being of employees.

Principle of supervision: With large number of clerical staff at work, the layout
should be so designed as to facilitate effective supervision and control.

Principle of good environment: Proper lighting and ventilation play a significant
role in office functioning. Interior decoration and external appearance adds to
mental stability and morale.

Principle of least cost: Arrangement and re-arrangement of office layout should
involve minimum expenditure. As good layout aims at making the most economic
and effective use of available space, cost of office services are automatically reduced.

2.5.3 Steps in Lay-out Planning

Before the layout plan is actually put into effect, the following preliminary steps
may be useful to take:

1) Get a drawing or blueprint prepared showing the area available.

2) Secure flow charts for different departments.

3) Determine the departments with heavy traffic movements.

4) Analyse the functional relationship between departments.

5) Make a preliminary block of assignment of space.

6) Determine the requirements of electrical fittings, water supply, and safety
   measures to be provided.

7) Refine the block by making templets to scale of all physical units like table.
   chair, file box. etc.

8) Check the entire layout design and make adjustments before submitting a final
   design for approval by management.

To enable the best arrangement to be made with the available space, 'Templets'
or card models may be made for each item in the office. A floor plan may be
drawn and mounted on a drawings board. This plan should show the location
doors, windows, partitions of any, telephone outlet, etc. The templets may then
be arranged in various portions till the best arrangement is secured. As soon as
it is felt that a satisfactory layout design has been made out templets may be
pinned in place as model.

2.5.4 Advantages of a Good Lay-out

A layout designed after carefully observing the steps mentioned above and with the principles and objectives in view, should provide the following advantages:

1) As the layout is designed after studying the nature of activities and flow charts of each department, efficiency of individual member of the office staff is expected to be high. This in turn should improve the overall efficiency of the office.

2) Because of the improved efficiency, the cost of office operations, should be lower with a corresponding increase in profits.

3) It is possible to have optimum use of machines and equipment in the office. The layout provides the joint use of machines and equipment which reduces capital investment.

4) The orderly appearance of the work place is important to the office employees. In fact, office workers are as proud of a impressive office as are the managers of the company. A tensionless and refreshing work place increase morale of the employees in an office.

5) A well-designed office lay-out and the people who work then enhance the goodwill of the organisation. Visitors and customers feeloroud to be associated with such an organisation.

6) A good office layout makes supesvision more effective. As the work flow takes the shortest route, actual supervision is reduceo to the min'mum. Effective supervision with minimum cost is ensured.

The layout plan of a large business office in given in Figure 2.1 (Ceotretised **Office**).

2.6 OPEN OFFICE AND PRIVATE OFFICE

Along with the planning of office layout, a major decision which the office manager has to take relates to the suitability of open and private office for the office staff and executives. He has to consider and decide whether to provide large rooms as open offices where departmental and equipments can be placed, or provide a number of small rooms and private offices for each department and executives.

2.6.1 Open Office

In a large business house, with centralised office services, one can see open offices which are large rooms or halls accommodating the staff of several departments or sections. Within the hall each department is allotted separate space for its staff and equipments, sometimes with shelves and filing cabinets decricating the area allotted. Small rooms or private offices are also provided for a few top executives and for office work which requires exclusive privacy.

Advantages: The open office concept is rapidly gaining ground in modern enterprises as it offers several advantages which are outlined below:

1) It is economical as there are no partitions or corridors and there is maximum utilisation of space.

2) Effective supervision is possible by fewer supervisors as there are no physical barriers to observation of people at work.

3) The layout of office can be arranged and rearranged to suit the requirement of the time.

4) It enables people to communicate with one another easily within the office.

5) As people can see each other and exchange ideas/views on office matters, their movement is minimised.

6) Office machines/equipments can be utilised to the maximum extent. Hence, fewer machines are needed to cope with a general volume of work.

7) With no partition walls or separate rooms in a large hall, one can have better lighting and ventilation.

Disadvantages: The open office arrangement also suffers from certain limitations.

1) It is not suitable for office work which is of a confidential nature or requires concentration of mind.

2) Frequent disturbances due to operation of machine or noise produced by conversation or telephone calls, slow down the place of work in the office.

3) Senior staff may not like it because there is no privacy and this feeling may be reflected in their work.

4) Growth and expansion of business, and addition of staff may result in overcrowding and congestion.

2.6.2 Private Office

Very often the private office is regarded a symbol of status and importance in many organisations. Private offices are small rooms of cubicles provided to officers for their exclusive use. Small groups of clerical staff may also be allotted small rooms in a hall separated by partition walls. This is found necessary if the work requires concentration of mind as in accounting and statistical work. Officer may be provided by an organisation which can afford it.

Advantages: The following are some of the advantages of private office arrangement:

1) Privacy is ensured when work of confidential nature is carried out in a separate cubicle or room.

2) Prestige of an employee is enhanced when he has a private office. This also satisfies personal ego of the employee which may result in better performance or work.

3) Employees who are provided with private offices keep their working area neat and tidy. This amounts to better work environment.

Disadvantages: There are a number of drawbacks of private offices.

1) Private offices usually require proportionately more space to accommodate staff and equipments. It also hampers ighting and ventilation of an adjacent part of the office.

2) Private offices do not have exibility for rearrangement if necessary.

3) Supervision of work becomes difficult and more and more supervisors are needed for different working rooms used by staff.

4) Valuable office space is war ed in providing partition walls, corridors etc.

5) Staff movement may increase and bring down the efficiency of work.

6) Overall cost of office services may increase.

The office manager has to carefully consider the above point before deciding on the question of open and private offices.

2.7 STEPS IN MOVING OFFICE

In course of time as business activities expand, the office may have to be shifted from one place to another unless suitable accommodation is owned by the organisation. In case it becomes necessary to nave a fresh layout plan either in the same location or a different location the movement should be planned carefully. The following steps to shift the office in the shortest possible time and the minimum loss or damage to equipments should be kept in mind.

Formation of Movement Committee: Whenever it is decided to shift the office from one place to another, it is desirable to constitute a committee consisting of senior personnel from various departments headed by a senior executive under

whose overall charge the movement should be planned and executed. This committee will coordinate the move and setting up the office at the new place. Each department should have a sub-committee which should be headed by the departmental head. The departmental sub-committee shall get things done in the department for the move.

Preparation of check list: A check list will have to be prepared for the move which may include:

a) Arrangements for

   i) Building, directing showing new location.

   ii) Cleaning all furniture, carpets, curtains, etc.

   iii) Change of telephone, telex, and FAX facilities.

   iv) Requisitioning new telephone connection.

   v) Notifying shift of utility services in advance.

b) Notify

   i) Share holder, Debenture holders, Depositers, etc

   ii) Bankers, Govt Depts, Post Office.

   iii) Customers, Suppliers, Wellwishers.

   iv) Legal advisers, Registrar of Joint Stock Companies.

Tagging and identifying: All items of equipment, machinery, furniture and fixtures should be numbered and tagged. It should be clearly mentioned in the tag, the name of department using the equipment and the floor where it should be placed. Tags of different colours may be used to signify the floor where the item is to be finally placed. Such colour tags will help in easily identifying departmental equipments.

Packing and scrapping: All machines, equipments, executive chairs, tables etc., should be packed carefully to avoid damage during transportation. Professional packers are available for packing. One could avail the service of such agencies. Machines which are old and are not currently used due to change of technology, need not be moved to the new place. It will not only involve transformation cost but also require space. Such machines should be scrapped and sold for whatever price it realises.

Timing of the move: Shifting to a new place should cause least disturbance to office work. It is ideal to schedule a move when one or two holdings occur or during off-season.

Actual move: At a time only one department should be moved. Simultaneous move of two or more departments may create confusion and delay as items belonging to one department may be placed in other departments. It is necessary to arrange for an adequate number trucks with crew or labourers to move the office.

Arrangements at the New Office Place: Placement of all furniture, machines, equipments etc. at appropriate positions should be supervised after briefing employees regarding the new building plan.

Check Your Progress B

1) What does 'office layout' mean?

....

....

....

....

2) Fill in the blanks

   i) The main objective of office layout is the maximum utilisation of ....

   ii) To cope with increased volume of work, the office layout should be ....

   iii) ....of departments should be carefully studied while planning the office layout.

   iv) A good office lay-out has the advantage of maximum utilisation of..... and ....

   v) Departments dealing with the public should be located near the ....

   vi) .... the items of furniture, equipment and machines is necessary before shifting the same to a new office premises.

3) Which of the following statements are True and which are False?

   i) Open offices are more economical than private offices.

   ii) Private offices should be provided only for office staff doing confidential work.

   iii) Space allotted to different departments in an office may be separated by shelves.

   iv) Interrelated departments should be located adjacent to each other.

   v) Fewer supervisors are required in the case of private offices accommodating groups of office staff.

2.8 LET US SUM UP

In every organisation the office manager aims at getting the office work done with maximum efficiency and economy. For this purpose, he selects the best personnel and equipments. Even their work efficiency may be low if the office environment is not congenial to efficient working. Unless office employees are provided with suitable physical accommodation and congenial work environment they cannot be expected to work with full physical and mental vigour. This is because office employees spend the best part of the day at work, and are required to do mental work of a repetitive nature causing monotony and boredom. Thus, to have the best performance from office employees, the office manager has to provide suitable accommodation in a reasonably developed locality having proper environment.

To decide on the exact location of office requires consideration of the options available in this regard. The office manager must consider the pros and cons of locating the office in urban and suburban areas, and also consider whether to hire necessary accommodation or to undertake construction of own accommodation. There are advantages and disadvantages of locating the office in urban area, as also of suburban location. The choice has to be made on the basis of costs and the corresponding advantages.

Several factors are taken into account while selecting the best site for the office, e.g. proximity to other units of the enterprise, and availability of service facilities, means of transport and communication, sufficient space, and of course, the cost of procuring the required space.

Securing office space involves choice between owning and hiring a building. It may be desirable to construct a new office building in view of several benefits. But it has also certain drawbacks, particularly the need for making heavy investment outlay and the time required for it. Buying a building may be possible at a bargain price but the building on sale may not suit the exact requirements and may call for alterations in the existing structure.

Hiring or securing a building on lease may be preferable where owning a building is beyond the means of the organisation. However, space which is available on hire or may be taken on lease, again is not likely to suit the exact requirements; it may not also be available in the most suitable location.

Office layout or planning office space utilisation of administrative arrangements to be undertaken by the office manager. It calls for systematic arrangement of departments and sections along with personnel and equipments so as to ensure the best utilisation of office space, smooth flow of work and to keep operational costs at a minimum. Guidelines provided by the principles of layout should be followed to achieve the objective in view.

A good office layout not only ensures optimum utilisation of office space, but also leads to high operational efficiency, reduced costs, best possible use of machines and equipment gives a tidy look,. makes supervision easier, and enhances goodwill of the organisation.

Planning of office layout includes taking a decision regarding the suitability of the open offices and private offices. Open office consists of large rooms with space decorated for different departments, sometimes having counter-high shelves and filing cabinets separating them. Open offices are economical as regards utilisation of space and supervision. Flexibility of the layout, minimum movement of staff and easy communication are certain other advantages of open offices. There are certain disadvantages too including lack of privacy of work, disturbance caused by noise of conversation and machines, and congestion with increase in the number of office staff.

Private offices are small rooms or cubicles meant for exclusive use of senior officers or by small groups of concentration of mind. This arrangement ensures privacy and adds to the prestige of some individuals. But it requires proportionally more space to be provided for partition walls and corridors. Supervision is rendered difficult and results in higher costs. Partitions of the space hamper ventilation and lighting adjacent spaces.

Shifting an office may become necessary unless suitable accommodation is owned by an enterprise. Movement of office to a new place must be planned so that shifting is possible in the shortest possible time and with minimum loss or damage to equipments and machine. The movement should be carried out under the overall control of a committee of senior personnel from different departments.

2.9 KEY WORDS

Leasing: A contractual arrangement by which assets may be used by one party (lessee) on payment of a rent to the other party (leaser).

Open Office: A large room or hall where entire office staff is accommodated.

Layout: Arrangement and placing of men, materials, machines, equipments in the office.

Private Office: Small rooms or cubicles meant for exclusive use of senior officers or small groups of office staff.

2.10 ANSWERS TO CHECK YOUR PROGRESS

A) 1) (i) False   (ii) False   (iii) True   (iv) True   (v) True

B) 2) (i) Space   (ii) Flexible   (iii) Flow Charts
      (iv) Space, machines/equipments   (v) Entrance   (vi) Tagging

   3) (i) True   (ii) False   (iii) True   (iv) True   (v) False

2.11 TERMINAL QUESTIONS

1) State the factors, you will consider while deciding on the location of office.

2) Discuss the advantages and disadvantages of locating office in a suburban area.

3) What do you understand by office layout? Discuss the principles of office layout.

4) What do you mean by open office? What are its merits and demerits?

5) As office manager what steps will you take while laying out an office?

6) What objectives should be kept in view while planning for office lay⸱ ? Explain clearly the steps to be taken in lay-out planning.

7) Write notes on
   a) Leasehold building for office accommodation.

   b) Merits and demerits of private office.

   c) Steps in office layout.

   d) Factors affecting location of office building.

8) Show the layout plan of a centralised office with the help of a diagram.

Note: These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

UNIT 3 OFFICE ENVIRONMENT

Structure

3.0 OBJECTIVES

After studying this unit, you should be able to:

- state the components of office environment
- describe the importance of interior decoration
- outline the types of furniture and fixtures
- explain the significance of office lighting and ventilation
- distinguish between internal and external noise
- mention the need of sanitation, cleanliness and health
- state the importance of safety and security.

3.1 INTRODUCTION

Employees generally prefer to work in a comfortable work environment. They are more productive when the working conditions are pleasant and satisfactory. Over the years, enlightened managers have realised the importance of providing congenial working conditions to the employees. Office work is mostly mental work which is repetitive and monotonous. It requires greater concentration of mind, free from distractions. Poor working conditions cause mental strain. As a result, efficiency of work and the quality of performance suffer, and employee's morale tends to be low. It is, therefore, the duty of an office manager to provide

an environment which is comfortable and conducive to efficiency of work. In the Unit 2 you have learnt about various aspects of office accommodation, location and layout. This Unit is devoted to the study of office environment with respect to the major components viz., interior decoration, furniture and fixtures, lighting, ventilation, cleanliness, sanitation, safety and security.

3.2 COMPONENTS OF OFFICE ENVIRONMENT

The term 'office environment' refers to the general physical conditions under which office activities are performed. The major components of office environment include

- Interior Decoration
- Furniture and Fixtures
- Lighting and Ventilation
- Sanitation, Cleanliness and Health
- Safety and Security

3.3 INTERIOR DECORATION

Interior decoration includes pleasant colouring of walls, doors and windows; placing of attractive calendars, pictures, paintings and charts on the walls; choosing the right type of floor coverings, and the use of suitable furnishings. It is, in short, a way of decorating the interior of a room or building.

It has been found from experience that decent interior decoration gives a pleasing appearance to the office and makes employees cheerful at work. A tastefully painted and well-furnished office stimulates office employees to perform better. Drab surroundings depress the mind and ultimately affect the employee's will to work. The office rooms should, therefore, be painted with appropriate colours and pleasingly decorated to have a positive effect on the morale of office staff.

3.3.1 Colour Conditioning

Human beings are attracted by colour, because there is a physical quality in colour that stimulates emotions. Some colours, when used in suitable combinations, produce a cheerful effect on human mind. Certain other colour combinations may produce the opposite effect. For example, blue, green and orange are tasteful but red indicates heat and is disturbing in its effect.

While choosing colours for office decoration, the purpose should be not only to create a pleasing atmosphere for employees, but also to retain and enhance the effect fo natural light as far as possible. Light has the most decisive influence on colours. On what basis should colour schemes be chosen for different parts of the office premises? The following guidelines, provided by colour experts, may be adopted for the purpose.

1) Warmer colours (e.g. orange, yellow, brown, etc.) should be used for offices receiving northern light, whereas cooler colours (e.g. blue, green, etc.) should be used for office receiving southern light.

2) Different colour combinations may be used to break the monotony of bare walls in the office.

3) Entrance halls, reception rooms, and cloak rooms, which are mostly used by customers should have neutral colours (e.g. grey, white, etc.). Lighter colours should be used for corridors, gangways, stairways, canteen and rest-room.

4) Colours can also be used to provide some degree of individuality, each department of an office can have its own colour scheme.

5) In short, the best use of colour is one that meets its purpose without demanding undue attention, it should be attractive, not distractive.

Proper use of attractive colours in the decoration of an office can produce truly amazing results. It creates a favourable image of the office in the minds of outsiders. It also creates an atmosphere conducive to good work performance and the personal satisfaction of employees. It minimises eye fatigue and enables employees to do their tasks with enthusiasm. Proven researches conducted elsewhere in the world revealed that when colours are selected and used scientifically, the production of employees could go up by 15 to 30 per cent.

3.3.2 Floor Coverings

Interior decoration will be incomplete without adequate floor coverings. A proper floor covering not only reduces noise but also adds to the beauty of the office. The floor coverings may include carpets, linoleum, wood blocks, rubber or foam mattresses. While selecting the floor coverings for the office, the following points should be kept in mind:

1) **Comfortable:** The covering must be comfortable to the feet. It must absorb shocks in walking.

2) **Sanitation:** It should be made of a substance which can be readily cleaned, least it becomes a convenient place for dust deposits affecting the health of employees.

3) **Durability:** The covering should wear uniform temperature and resist changes in humidity. It should be able to absorb sound as well.

4) **Ease of repair:** The covering should be amenable to easy repairs and maintenance.

5) **Economical:** The cost of floor covering should be within the means of an organisation.

3.3.3 Furnishings

Furnishings include curtains for doors and windows and coverings for chairs, tables, sofa sets, and wall hangings. They give a distinct look to the office and serve as status symbol for office employees. They not only decorate the office but also prevent glass and excessive illumination from natural or artificial lighting. The choice of furnishings for an office depends on factors which govern the choice of floor coverings, as explained above, such as the availability of finances, climatic requirements (e.g. thick cloth or woollen curtains used during winter), ease of cleaning and maintenance cost etc. Some big organisations these days also go for wall hangings (paintings and art pieces) in an attempt to present a luxurious appearance. Such wall hangings, if properly displayed, break the monotony of a room and enhance the prestige of the organisation.

3.4 FURNITURE AND FIXTURES

Office work is performed by the clerical staff who have to spend long hours in the office every day. Suitable furniture should, therefore, be provided to enable them to perform their tasks comfortably, speedily and efficiently. The term 'furniture and fixtures' in an office includes desks, tables, chairs, cabinets, trays, almirahs, cupboards, and other necessary fittings and fixtures like desk lamps, waste paper baskets, telephone stands, racks for files, etc. Good office furniture offers a comfortable place to sit and a convenient place for positioning equipment (typewriters, calculators, etc.) papers and books. Moreover, it makes the office attractive and contributes to good working environment. It also serves as a source of incentive by stimulating employees to do better work by developing a favourable attitude toward their jobs.

3.4.1 Types of Furniture

The usual office furniture found in any modern office are desks, tables and chairs. Storage and filing equipments, such as filing racks and cabinets, lockers and almirahs are also referred to as office furniture. Office furniture may be broadly

divided into three types: (i) Executive Furniture, (ii) Special Purpose Furniture, and (iii) Built-in Furniture.

1) **Executive Furniture:** Executive furniture is made in accordance with the taste of the executive concerned and is made mostly for appearance. The main purpose is to impress visitors with the prestige and importance of the person using it. Executive furniture is generally of superior quality and is used in more important private offices in the organisation. There is no standard size of the executive desk or table, because this depends on the status of the executive and the size of the room.

2) **Special Purpose Furniture:** Special purpose furniture is designed for special use in offices and includes the following:

   a) **Clerical desk:** This is meant for clerical operations (writing, recording, etc.). Usually this kind of desk is a singly pedestal one containing some drawers to keep files, papers, etc.

   b) **Typist's desk:** This is special kind of desk designed to meet the requirements of a typist. It has a suitable surface for keeping the typewriter and similar machines (calculator, etc.). The desk usually contains two or three drawers or trays for placing papers, keeping pencils, rubbers, carbon papers, records, typed documents, etc.

   c) **Machine desk:** This is specially designed to place adding, accounting, billing, calculating, card-punching and copying machines of various types. Usually, a well is dug at either end of the desk so that the machine sits lower than the standard desk height.

3) **Built-in Furniture:** Floor space can be saved by the use of built-in or collapsible furniture. For example, almirahs built in wall recesses with laminated plastic wood veneers can stand rough handling and are not subject to scratches. They also prevent dust accumulation on the files.

In addition to a suitable desk and a comfortable chair, office employees also require certain other fixtures for performing their operations efficiently. These fixtures include desk lamps, waste paper baskets, telephone stands, and miscellaneous items, such as pencil stand, pin cushion, stamp, pad with ink, dust bin, etc.

3.4.2 Choice between Wooden and Steel Furniture

After deciding on the type of furniture to be purchased, it is necessary to look into another important aspect i.e., whether to use wooden or steel furniture for office use. Wooden furniture is durable and solid in make. It can be shaped and designed in a variety of ways. It is pleasing to the eye and gives a general feeling of warmth. It gives a feeling of great comfort and, compared to steel furniture, it has neatly polished surfaces. Finally, it can be repolished at a relatively low cost. However, steel furniture is increasingly used in modern offices as it has some obvious advantages over wooden furniture. Steel furniture is fire-resistant. It has a long life and is not easily damaged or spoiled. It is very light in weight and can easily be moved in case of need. It does not shrink, swell, warp or crack. Steel drawers are safe against insects, rats and mice. Finally, steel furniture can be made to harmonise with any surrounding. From the cost point of view, there is not much difference between wooden and steel furniture. The choice between these two types of furniture, ultimately, depends on the individual requirements of the organisation and the tastes of the employees.

3.4.3 Principles Governing Selection of Furniture

Office furniture represents a long-term investment. Hence, adequate care should be taken by the office manager while selecting furniture, keeping in view the present as well as future requirements. The following guidelines should be useful to the office manager taking the decision.

1) **Economical:** The cost of the furniture should be within reasonable limits so

that it may be purchased out of the available funds. However, even a costly item can be purchased if it is really useful.

2) **Suitable:** The items selected must be suitable for the purpose to be served. Designed, size, working and sitting surfaces, colour, number of drawers, height, etc. should be according to the requirements of the work to be done.

3) **Uniform:** Furniture should be adaptable to multipurpose use. To this end, furniture of uniform quality and make should be purchased for use in various departments. This will enable more than one type of work to be performed using the same furniture. It is beneficial to the organisation as well, in terms of lower cost of servicing and maintenance, and lower cost of purchasing in large quantities.

4) **Durable:** Since furniture is purchased for long-term use, it should be durable and long-lasting. To this end, only quality furniture should be purchased. Now-a-days, steel furniture and equipments are increasingly used as these are not only more durable than wooden furniture, but also ensure safety against fire and burglary.

5) **Flexible:** Furniture purchased for the office must use the floor space economically. It should be light in weight so as to permit easy movement from one place to another. As far as possible, furniture with built-in file units should be purchased so that the paraphernalia of employees can be kept in one place.

6) **Comfortable:** Office work is an indoor work, and employees mainly do desk jobs seated inside the office during the working hours. Hence, furniture which offers maximum comfort should be purchased for the staff. The chairs, tables, desks, etc. should be of correct dimensions. The seating surface must be soft. It must offer sufficient aeration from beneath. The back seat rests should be fixed at proper angles. It should be possible to adjust these to meet individual requirements.

7) **Attractive:** Furniture is bought not only for its usefulness but also for its appearance. An artistic design is worth paying for, because it makes the office look more attractive. The goodwill of the firm is reflected usually by the appearance of good furniture in the reception and other 'offices open to public'. Offices should, therefore, purchase furniture that is not only useful but also attractive and elegant.

Check Your Progress A

1) List the components of office environment.

....

....

....

....

2) Which of the following statements are True and which are False?

   i) Employees would love to work in a dirty environment.

   ii) A decently decorated office is an eye sore.

   iii) Light is the most important influence in the use of colours.

   iv) Poor working conditions cause mental strain.

   v) Wooden furniture is fire-resistant.

   vi) There is no standard size for the executive desk or table.

3.5 LIGHTING

Lighting is perhaps the most important of office environment. Virtually every

task performed in the office requires proper light. There can be no proper work done without adequate light. Poor lighting, or strong lights with attendant glare, cause eye strain, mental fatigue and irritation. This, in turn, results in delays, interruption and mistrkes in office work. Therefore, to provide for adequate lighting is essential for employees to perform their tasks satisfactorily. The following two factors are considered important with respect to lighting arrangement.

1) **Quantity of light**: The common measurement of light is a foot-candle which is the amount of illumination one foot away from the standard candle. Normally, typing work requires need 150 foot candles whereas other clerical activities need 70 to 100 foot candles of light. Office work is mostly paper work, so sufficient light should be provided as per standard requirements.

2) **Quality of light**: The quality of light is considered proper if it is free from glare and is diffused evenly over the illuminated area. Brightness should be fairly uniform rather than varying from one portion of the office to another. Shadows should be minimised by having lights falling from different sources in a room.

Natural and Artificial Lighting

There are two sources of light in the modern office: (1) Natural, and (2) Artificial.

1) **Natural Lighting**: Natural light or day light is the best form of light. This is both economical and good for the health of employees. It causes less eye-strain and keeps the employees psychologicall happy. As far as possible, maximum use should be made of natural light for the office. This can be achieved by:

   i) having large windows;

   ii) using external reflectors;

   iii) applying better colours for walls, tables etc.

   iv) rearr ging furniture (e.g., desks should be kept near windows, persons doing figure work, and other eye-straining work should be placed near windows); and

   v) using diffusing glass panes so as to redirect light in rooms where it is most wanted (where natural light is too bright dark window curtains may be used).

Though natural light has its own merits, modern offices cannot entirely depend on it as the intensity of light changes with the time of day, weather conditions, height of adjacent buildings, etc. In some places natural lighting may not be available at all, or when available, may not be dependable. Hence, most modern offices combine both natural and artificial lighting arrangements.

2) **Artificial Lighting**: Artificial light may be in the form of table lamps for individual employees, or shaded lamps suspended from the ceiling, or fitted on the walls, or fluorescent tubes or filament bulbs. Fluorescent lighting is preferred to other types of lighting in offices as it produces less heat and glare, lasts longer, and consumes less electricity. More importantly, the light is more evenly distributed.

One important advantage of artificial lighting over natural lighting is that it can be controlled as regards intensity and quality of light to serve specific requirements of work in the office. However, the cost of installation and maintenance of artificial light is rather high. This problem could be solved by making the best possible use of natural lighting and supplementing the same with the right degree of artificial lighting. This can be achieved through the following steps:

i) Using light colours on office walls and ceilings that help in using light, both natural and artificial, to the best advantage.

ii) Cleaning lamps, reflectors, walls, windows, lampshades, regularly.

iii) Using bulbs and tubes of proper waltage and voltage.

iv) Replacing lamps that have outlived their utility (e.g., gas filled lamps have 1,000 hours of life, fluorescent lamps have over 6,500 hours of life).

3.6 VENTILATION

Ventilation in the office refers to the supply of clean and fresh air of the right amount, right temperature and humidity (moisture in the air). As a rule, the office should be well ventilated. Constant flow of fresh air in the office reduces fatigue. In the absence of proper ventilation, the rooms become stuffy, especially during rainy seasons, causing drowsiness and dullness in the employees. Droughts, especially during summer when hot winds blow, cause irritation to the staff. In a hot and humid country like India, the problem is one of ensuring a steady flow of cool, dustless, air in the right speed and humidity (at least 600 cubic feet per person per hour is the normal requirement). The following steps might help in ensuring proper ventilation in the office:

1) Windows, doors and ventilators must be properly located so that a constant inflow of fresh air and outflow of stale air is ensured. Electric fans, exhaust fans, blowers and air-filters may be used to draw in natural air, filter the dust and diffuse the air evenly throughout the office.

2) An air-conditioning system can be installed to eliminate the problem of cleanliness, heat, humidity, noise, etc. One great advantage of air-conditioning is that it keeps the temperature at a uniform level all through the year. It not only ensures good ventilation but filters the air as well. But, it is a costly system and the office manager must weigh the pros and cons carefully before installing the same.

3.7 NOISE

Noise may be defined as an unwanted sound inside or outside an office. The effects of noise on employee's performance include difficulty of concentration (hence, reduced output), high error rates, increased fatigue and low morale. Even frictions among employees may be traced to mental irritation caused by noise. The office manager trying to provide a good work environment must, therefore, pay attention to the causes producing noise, internal as well as external, and try to control the same through some positive steps.

3.7.1 Internal Noise

The sources of internal noise are: conversation, rustling of paper, scrapping of chairs against the floor, clicking of typewriter keys and use of other noise making equipments, the ringing of the telephone, door movements, noisy fans, call bells, toilet operation, and movement of employees and visitors through corridors and gangways. The problems of internal noise are within the control of the office manager. It is possible to reduce or eliminate internal noise if the following steps are taken:

i) Noisy machines and equipment may be kept away from the office and located in separate rooms.

Walls, ceilings and floors can be covered with sound-absorbing materials (rugs, carpets, drapes, etc.).

iii) Floors of rooms, gangways and corridors may be covered with rubber, coir or plastic mats to reduce the sound of footsteps.

iv) Telephone bells may be replaced by buzzers or light indicators.

v) Automatic door-springs or rubber pads may be used to lessen the sound of slamming doors.

vi) Office staff may be instructed not to talk in loud and noisy tones.

vii) Visitors should be received in only the visitor's room. Instructions may be given to staff to avoid lengthy conversation with visitors.

viii) Above all, the office building should be so planned that the noisy departments are located away from those demanding peace and quiet.

3.7.2 Extc nal Noise

The source of external noise are noise from moving vehicles, machinery, street sounds etc. Much of it enters the office through open doors and windows. The best way to avoid external noise is to locate the office in a quiet area. Where this is not possible, the following steps might help in minimising external noise:

i) Use of double doors, or automatic door closers.

ii) Use of sound-proof materials for walls and ceilings.

iii) Shifting the office to upper floors and the building to the extent possible.

Check Your Progress B

1) Fill in the blanks.

    i) The common measurement of light is a ....

    ii) Office work is mostly .... **work.**

    iii) Good quality light is free from ....

    iv) .... is the best form of lighting.

    v) .... lighting can be controlled as regards quantity and quality of lights.

    vi) .... keeps the temperature at a uniform level.

    vii) Constant flow of fresh air in the office reduces ....

2) State which of the following statements are True and which are False.

    i) The cost of installation and maintenance of artificial light is rather low.

    ii) The problems of external noise are within the control of office manager.

    iii) Modern offices depend on natural light only for their lighting requirements.

    iv) There can be no sight without light.

    v) The best way to avoid external noise is to locate the office in a quiet place.

3.8 CLEANLINESS, SANITATION AND HEALTH

Insanitary conditions may affect the health of employees adversely and they may find it difficult to discharge their duties properly. It is, therefore, necessary that office rooms are kept neat and clean, free from bad odour and infection. To this end, disinfectants should be used. Walls, partitions, ceilings, doors and windows should be whitewashed, painted or varnished at least once in two years. Waste papers and waste materials should be collected and disposed of at regular intervals. A sufficient number of spittoons should be placed wherever needed. Finally, adequate cloak rooms, latrines, and urinals should be provided at different convenient places. For regular cleaning, the cleaners employed should be provided with appropriate equipments and materials.

3.9 SAFETY

Besides providing congenial working conditions in the office, the office manager should also adopt suitable measures to ensure the safety of all employees working in the office. This is because accidents can occur even in offices on account of various reasons like:

i) Floors are highly polished and slippery;

ii) Floors and staircases sometimes remain wet with water, soap or oily substances;

iii) Floors are covered with torn or loose carpets;

iv) Trailing or telephone wires on the floor;

v) Leakage of electricity;

vi) Poor lighting and ventilation; and

vii) Sharp edges of wooden and metal equipments which are not covered.

The office manager can avoid these physical hazards by taking the following steps:

1) **First aid:** In every office, at least one first aid box should be kept ready for the benefit of employees. At least two or three members of the staff should be trained to give first aid as and when needed.

2) **Fire precautions:** Office papers, furniture and other equipments can catch fire easily with severity. To prevent fire accidents, certain positive steps must be taken by the office manager. Smoking should be discouraged especially in the rooms where inflammable materials are kept. Sufficient number of ash trays must be provided to employees. Electrical switches should be put off during non-working hours. It is also necessary to install fire extinguishing equipments at convenient places and train employees in their uses. Fire exits and escape routes should be clearly marked. Fire alarm should be fixed and tested from time to time. The employees should be made familiar with these precautions from time to time.

3) **Prevention of accidents:** To prevent accidents, there should be a regular inspection of machines, equipments, electrical connections, lighting arrangements, etc. Carpets and durris, if torn or frayed, should be mended immediately so that people walking in a hurry may not trip over. Stairs must have proper railings. Telephone cords and wires connecting heaters or fans should not trail in the floor. Polished floors should be discouraged in general offices and other areas visited by many persons.

3.10 SECURITY

One of the important functions of an office is to keep and preseve documents for future reference and use. To this end, all documents and office records should be kept under proper security. No piece of record should be taken out of office premises without seeking proper permission. Where the security arrangements are poor, there is always a possibility of theft, unauthorised removal or destruction of office records. To ward off such threats, it is necessary to keep important documents (deposit receipts. title deeds, bills of exchange, cheque books, registration documents, etc.) in office safes or bank lockers. Employees should be asked to take care of important official papers. They should be held responsible for any loss of records under their charge. Modern organisations employ night guards as a special security measure. Large-scale organisations go for fidelity guarantee insurance to cover the risk of defalcation, fraud, and embezzlement on the part of employees. Other security measures like seeking reports regarding the behaviour of employee from respectable persons (known as reference checking), demanding cash security from employees handling cash, etc. have become quite common these days. After employees are appointed, they should be given identity cards. This helps in preventing unauthorised entry of outsiders inside an office.

Check Your Progress C

1) State any of five causes of accidents in an office.

....

....

....

....

2) Fill in the blanks.

i) Smoking should be .... in rooms. as a fire-prevention step.

ii) Insanitary conditions affect the .... of employees adversely.

iii) .... exits and .... routes must be clearly marked.

iv) All records of office should be kept under proper ....

v) Identity cards help in preventing .... entry of outsiders inside an office.

3.11 LET US SUM UP

Congenial work environment is important for ensuring efficiency of work and quality of performance by employees in an office. Office environment refers to general physical conditions in an office and includes items like interior decoration, furniture and fixtures, lighting and ventilation, sanitation and cleanliness, and safety and security.

Interior decoration refers to pleasant colouring, right type of floor covering and the use of suitable furnishings. A tastefully painted and well-furnished office stimulates employees to perform better.

Furniture and fixtures include desks, tables, chairs, cabinets and other fittings. Special purpose furniture is designed according to the requirements of users. To economise floor space, built-in furniture is preferred in offices. These days steel furniture is increasingly used in offices owing to its safety, flexibility, and fire-resisting quality. While purchasing office furniture, the manager should ensure that it is suitable, durable, comfortable, economical and attractive.

The office must have a good lighting system. The requisites of good lighting arrangement are: well-diffused illumination and working surfaces without glare or sharp shadows. As far as possible, maximum use of natural light must be made. Where this is not feasible, artificial lighting in the form of lamps or fluorescent tubes could be used.

Ventilation means the supply of fresh air in required quantities at the right temperature. This could be achieved by having an adequate number of windows, fans, coolers and air-conditioners in the office.

Noise means unwanted sounds inside or outside an office. Both are harmful in their effects and, hence, need to be controlled. Internal noise could be avoided by using sound-absorbing materials, automatic door springs, placing noisy machines in separate rooms, etc. External noise could be avoided by using double doors and sound proof materials for walls and ceilings.

The office and its surrounding should not only be clean but also free from bad odour and infection. To achieve this, rooms, tables and desks must be cleaned regularly; walls white-washed or painted; waste paper be disposed off and adequate number of cloak rooms, latrines, and urinals be provided in the office.

Safe working conditions are a must for employees. Accidents do occur even in offices owing to several reasons. To prevent these, it is necessary to institute fire-prevention measures and to check machinery and equipments regularly.

Finally, the office must be able to keep documents and records under proper security. Office safes, bank lockers, appointment of security guards, etc. are some of the measures that help an office to hold its records in a secure way.

3.12 KEY WORDS

Work Environment: The general physical conditions in which office work is carried on.

Interior Decoration: Way of decorating the interior of a room or building.

Colour Conditioning: Choosing the right colour combination so as to stimulate human emotions.

Ventilation: Supply of clean and fresh air of the right amount at the right temperature.

Foot-candle: The common measurement of light.

3.13 ANSWERS TO CHECK YOUR PROGRESS

A) 2) (i) False (ii) False (iii) True (iv) True (v) False
(vi) True

B) 1) (i) Foot-candle (ii) paper (iii) glare (iv) natural (v) artificial
(vi) air-conditioning (vii) fatigue

  2) (i) False (ii) False (iii) False (iv) True (v) True

C) 2) (i) discouraged (ii) health (iii) fire, escape (iv) security
(v) unauthorised.

3.14 TERMINAL QUESTIONS

1) Explain the importance of good work environment for the office staff. Discuss the factors you will take into account while planning for office lighting, ventilation and furnishing.

2) Discuss the importance of office lighting, ventilation and interior decoration from the point of view of efficiency of work.

3) State the importance of interior decoration in a modern office.

4) Write short notes on:
   i)   Colour Conditioning
   ii) Executive Furniture
   iii) Floor Coverings
   iv) Furnishings

5) You have been asked by management of a firm to select furniture and some other equipment for a particular job. What considerations will you bear in mind while doing so?

6) Distinguish between:
   i)   Natural Lighting and Artificial Lighting
   ii) Internal and External Noise
   iii) Executive Furniture and Special Purpose Furniture

7) Discuss the effects of noise in relation to clerical work and the ways to reduce the same.

8) List the common physical hazards which may exist in an office. Indicate also some of the precautionary measures which an office manager should take to eliminate or reduce such hazards.

9) "The sanitary conditions prevailing in the office have a potent effect on the staff and consequently on the quality and volume of work accomplished." Give the various sanitary requirements of a modern office in the light of this statement.

10) Explain the sanitary requirements of an office.

11) Discuss the safety and security requirements of an office.

> **Note:** These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

UNIT 4 OFFICE SYSTEMS AND PROCEDURES

Structure

4.0   OBJECTIVES

After studying this unit, you should be able to:

- state the meaning of system
- distinguish between systems, procedures and methods
- outline major office systems and procedures
- state the advantages and limitations of systems
- define office manual and highlight its importance
- enumerate various types of office manuals
- explain the flow of work and enumerate the problems in flow of work
- describe the various flow charts

4.1   INTRODUCTION

In unit 3 you learnt that proper office environment is necessary for efficiency of work and quality of performance by employees in an office. Similarly, to provide efficient and economical clerical services to the organisation, it is equally important that major office activities are clearly identified and the best means are devised to perform them. Office systems, procedures and methods are developed to meet these objectives. In this unit you will learn about the meaning of system, its importance, difference between systems, procedures and methods, usefulness of office manual, and the flow of work employing flow charts.

4.2   MEANING OF SYSTEM

Broadly, the term 'system' may be interpreted as a planned approach to various

activities necessary to attain desired objectives. In other words, it is a planned way of completing any particular task. When the term system is used in connection with office work, it refers to the planned use of personnel, forms, records, machines and equipment for doing a particular phase of office work. For example, the purchase system involves using forms, making records and engaging personnel necessary to complete purchase transactions from the time of receiving a purchase requisition. This is followed by inviting tenders and placing orders until the goods are received and payments are made thereof. Similarly, there are systems for sales, accounting, filing, and other office activities.

In every office, there exists a specific system for each major office activity. For example, there is a system for filing records, a system for communication, a system for designing office forms, a system for selecting and training office employees. In the systems analysis, these major activities (mailing, filing, etc.) are known as 'subsystems' of the office system.

4.3 DIFFERENCE BETWEEN SYSTEMS, PROCEDURES AND METHODS

Generally, the terms 'systems', 'procedures' and 'methods' seem synonymous, yet there is a basic difference between these three terms.

System consists of a group of inter-related and inter-dependent parts operating in a sequence, and according to a pre-determined plan, in order to achieve certain goals. It is a planned way of performing office activities.

Procedures refers to a series of sequential steps or operations needed for completing a major phase of office work uniformly and consistently. Thus, within the system there may be procedures set for each of the different phases of office work. For example, in the sales system, definite procedures exist for processing an order, shipment of goods sold, handling claims, making adjustments etc. The procedures are planned in such a way that every time a particular job has to be performed, the same operations may be carried out in the same sequence and in the same way. Office procedures (also called office routines) involve a number of operations. An operation is the smallest step in a procedure. For instance, the procedure for sorting of papers before filing may require several operations like examining the papers as to their code numbers under which they are to be filed, putting them in the sorting tray, arranging them date-wise, etc. Thus, a procedure lays down the sequence of steps to be followed usually by more than one person while performing a recurring type of work. If well-designed, a procedure tells who does what, how and when.

There is a method for performing each operation within a procedure. A method is the manual or mechanical means and devices by which each operation is performed. For instance, in an order-processing procedure there is a method for acknowledging the incoming order, checking the credit status of the customer, preparing the sales invoice, and distributing the copies of the invoice. A method is, thus, concerned with the sequence of motions used in performing an operation with the use of specific equipments. A method is a part of the procedure which, in turn, is a part of the system.

4.4 MAJOR OFFICE SYSTEMS AND PROCEDURES

Offices have certain basic systems, each made up of a number of procedures. These, in themselves, provide a summary of the office activities. The major systems of modern business concerns moicde purchasing, selling, accounting, personnel management, etc. Some of the important systems and their procedures can be briefly explained as follows:

Systems		Procedural Steps and Methods
Purchasing (In detail)	Step-I	Initiate Purchase Requisition
	Methods	• Prepare purchase requisition • Get authorisation
	Step II	Select Source of Supply
	Methods	• Advertises • Send tender forms • Obtain quotations • Open tenders and evaluate • Select the best source
	Step III	Order Supplies
	Methods	• Prepare purchase order • Send the order to suppliers
	Step IV	Receive Supplies
	Methods	• Check quantities • Inspect quality • Send supplies to stores
	Step V	Pay Supplier
	Methods	• Prepare payment voucher • Prepare cheque • Send cheque to supplier
Selling (In brief)		• Receipt of Order
		• Processing the Order
		• Shipment of Goods
		• Accounting for Sale
		• Accounting for Receipt or Payment
		• Sales Returns and Allowance
Accounting (In brief)		• Purchases
		• Sales
		• Cash Receipts
		• Cash Payments
		• Payrolls
		• Financial Reports

Check Your Progress A

1) Which of the following statements are True and which are False?

    i) A system is a planned way of doing a particular activity.

    ii) A procedure consists of a number of systems.

    iii) A system is a part of a procedure.

    iv) A procedure is a part of a method.

    v) A method is a part of a procedure which, in turn, is a part of a system.

2) Fill in the blanks.

    i) An .... is the smallest step in a procedure.

    ii) Each system consists of a number of ....

    iii) A system is a group of interrelated and .... parts operating in a sequence.

iv) A procedure lays out the .... of recurring steps.

v) A method is the .... or .... means by which each operation is performed.

vi) There is a method for performing each .... within a procedure.

4.5 ADVANTAGES AND LIMITATIONS OF OFFICE SYSTEMS

4.5.1 Advantages

The basic purpose of having an integrated pattern of office systems, procedures and methods is to ensure economic and efficient performance of office work. Office work is carried out by employing three inter-related factors viz., personnel, forms and equipment. Unless these three factors are coordinated and used in a planned manner, it is not possible to achieve maximum efficiency in office work. It is, therefore, necessary to devise appropriate office systems and procedures for each phase of office work. This helps management in a number of ways. These are:

1) **Smooth flow of work:** The existence of systems and procedures in an office helps an employee to know what work is to be done how and when. He/she follows a definite method that helps in avoiding wasteful motions, delays and errors while carrying out instructions. As a result, office work is processed in an orderly manner without any interruption.

2) **Uniformity of action:** Systems also help employees to follow identical procedures for similar work. This brings about uniformity of action in office routines. Employees need not search for original solutions to solve repetitive problems. A standard procedure can be readily put to use saving both time and energy.

3) **Economy in Operations:** Systems and routines ensure economy in office operations by eliminating (i) wasteful motions, (ii) duplication of effort, and (iii) delays and errors. The focus is always on end-results. All these help in performing office operations economically.

4) **Fixation of responsibility:** With standard systems and procedures, office work is divided and distributed in a systematic way. Employees are asked to handle definite work assignments and show results. There is no guessing as to who is answerable for a particular piece of work. In short, it is easy to fix responsibility for the work done by employees.

5) **Training of staff:** Systems and procedures enable employees to learn the intricacies of their jobs quickly. They indicate the steps to be followed as well as the required time and order of performance. Members need not seek instructions every now and then.

   They can simply follow the procedure and switch over from one operation to the next quickly. The personnel are, thus, given a simple but effective training for performing various office activities.

6) **Coordination of activities:** Systems and procedures help employees to visualising the inter-related nature of different activities. They begin to appreciate the importance of working in step with other departments and sections which lead to coordinated efforts followed carefully without upsetting the progress of work in other departments.

7) **Management by exception :** Systems and procedures permit management to concentrate on exceptional matters rather than wrestle with routine affairs. They need not supervise all the work closely. Procedures help in ensuring consistent action for routine work.

4.5.2 Limitations

Along with various advantages, systems have some limitations also. A system is no better than the planning that goes into it. Weakness in the system is often

compounded by repeated usage. Therefore, to be effective, a system must be always kept up-to-date. When conditions undergo a change, the need for changing systems and procedures must be recognised. However, this is easier said than done. In reality, procedures once established, by and large, acquire a sort of permanency. They are rigorously followed throughout the office in the name of uniformity of actions and hampering the administrative process seriously. Employees begin to feel the choking effect of over elaborate systems and procedures. Standard forms and rulings acquire a status that few dare challenge. Therefore, no system should be so rigid as to preclude flexibility or be so detailed as to destroy initiative

Good systems do not just happen. They are the product of careful planning by management. While designing systems and procedures, management must specify the relationships between various departments and divisions, providing a basis for integration later on.

4.6 OFFICE MANUAL

The office systems and procedures, whatever these are, are usually communicated to employees in writing through what is known as 'Office Manual'. It is a written record of information, instructions and regulations regarding policies, functions, systems, procedures and methods to guide and control the activities of employees in the organisation. As a source book, the office manual contains the following information for the guidance of employees:

1) **General information** includes the name, address, telephone number etc., of the company and its departments; nature of business and addresses of its executives.

2) **General rules and regulations** pertaining to working hours, pay scales, leave benefits offered, disciplinary and retirement rules.

3) **Instructions** regarding what to do in case of emergencies such as fire, accident, serious illness, etc.

4) **Policies** regarding credit sales; selection of advertising media, training and development programme, purchase of capital equipment, etc.

5) **Other information** relating to job description—nature of supervision and control, reporting, relationships between superiors and subordinates, standard procedures to be followed for doing repetitive jobs (handling mail, filing, indexing, etc.).

4.6.1 Importance of Office Manual

In every organisation, it is important that employees must know what is to be done, when it is to be done, how it is to be done, and by whom it is to be done. Operations should be carried out in a systematic way and policies be interpreted in a consistent manner. The Office Manual serves the purpose of communicating the relevant information to employees. If it is written with great care and kept up to date, several advantages may be derived from the office manual. These are:

1) **Develops a sound organisation:** The manual requires management to state their policies and give expression to their concrete terms. They provide a sense of direction to the employees and clarify the responsibilities of various units in the organisation. Everyone is made aware of what to do and when. All these ultimately contribute to the development of a sound organisation.

2) **Conserves time:** Manuals are written documents, demanding compliance from employees. In case of any difficulty in processing work, employees can consult the manual and remove the sources of friction. Managers also need not spend much dme in answering questions regarding routine work. The printed instructions greayly reduce the need to guide employees constantly. In short, the manual helps conserve the time of top management as well as supervisors at the office level.

3) **Preserves experience:** Manuals reflect corporate experiences of outgoing officials in a written form. Managers may come and go out but the manual remains.

The office is thus, able to benefit from the ideas, experiences and knowledge of people who are no longer with the organisation.

4) **Trains new employees:** A manual also helps in training new employees. It conveys, in a readily available form, the established policies and procedures of the organisation. This enables employees to pick up their work without delay or hesitation.

5) **Improves morale:** Manuals tend to reduce uncertainty too. An employee knows what his job is, what is expected of him, and what to expect from the organisation. Such clear understanding builds the confidence of employees and boosts their morale.

6) **Management of exception:** Manuals relieve managers from the necessity of making repeated decisions on routine matters. Managers can concentrate on more important issues, leaving routine affairs to be handled by staff at lower levels.

7) **Improves efficiency of operation:** One positive advantage of the office manual is that it improves the efficiency of operations by reducing overlapping efforts, gaps in procedures and policies, and, more importantly, useless work. Communication regarding routine matters is simplified. These ultimately help in reducing office costs and improve efficiency.

4.6.2   Types of Office Manuals

There are various types of office manuals that may be used by an organisation. Broadly, office manuals may be classified into five categories as follows:

1) **Organisation manual:** This manual explains and defines the organisational structure. It contains information regarding the company's objectives, organisational philosophy, duties and responsibilities of major units, the role of key executives, products manufactured by the company, and includes an organisation chart showing the various positions in the organisation. In short, this type of manual provides exhaustive information about the company and shows how divisions and units relate to each other. Its circulation is normally restricted to each other. Its circulation is normally restricted to middle and higher cadre management.

2) **Policy Manual:** All organisation pronouncements are contained in this manual. Policies are guidelines to decision-making. They provide standing answers to recurring questions. The policy manual contains various resolutions and decisions of the board of directors establishing various policies of the company. Policy statements may be of three types: basic policies, general policies and departmental policies. Basic policies are statements of the long-range objectives of the company, general policies are related with the day-to-day operations, and departmental policies with the activities of individual units within the company.

3) **Employee Manual:** Also called 'employee handbook', the employee manual is the best known and most widely used manual. Its objective is to familiarize an employee with those matters that relate to his/her employment relationship with the organisation. Included in this manual is the information regarding pay scales, incentives, promotions, vacations, employee services, and educational activities. A well-written employee manual provides useful information to the new employees. It is also an invaluable aid and source of information to employees who have been with the company for many years.

4) **Procedures manual:** It contains detailed procedures and instructions to be followed by an employee in carrying out his work. A detailed explanation of what is to be done, how it is to be done, who is to do it, when it is to be done is provided through this manual. The purpose of this manual is to establish practices to be followed in performing organisational activities.

5) Speciality manuals A cariety of manals can be grouped under this heading, providing guidance to specific types of employees. The list includes filing manual, sales person's guide, loan officer's handbook. desk manual, correspondence manual, administrative practice manual, and mailing manual. All these manuals contain information regarding a particular type of activity; that is why they are cal'ed 'speciality manuals'.

Check Your Progress B

1) **State** whether the following statements are True or False.
   i) Manuals are written documents.

   ii) A **policy** manual explains and defines the organisation.

   iii) Organisation manual is also called 'employees manual'.

   iv) Policies are guidelines to decision making.

   v) Basic policies speak about day-to-day operations.

   vi) Good systems are products of careful planning.

2) Fill in the blanks.
   i) A system is no better than the .... that goes into it.

   ii) **Procedures help in ensuring consistent action** for .... work.

   iii) .... procedures are followed for similar work throughout the office.

   iv) No system can be so rigid as to preclude ....

   v) Manuals demand..................................... from employees.

   vi) Manuals **reflect corporate** experiences of ....officials in a written form.

4.7 FLOW OF WORK

A smooth and continuous flow of work is necessary to improve the effectiveness of systems and procedures.

Flow of work refers to the way in which work moves from one operation to another. It takes into account the quantity or volumes of work, the rate at which it moves along, and smoothness of its passage. The flow of work should be steady, constant and uninterrupted, and always in a forward motion. As far as possible, the 'straight-line-flow' of work involving few backward movements entail loss of time and, hence, should be avoided through careful planning. It is worth remembering that most office operations are repetitive in nature. As a result, a slight waste of motion and time in operation at any stage brings in considerable wastage.

Flow of work is an important dimension of office operations as it helps organisation at performance in the following ways:

1) Work passes from one clerk to another quickly.

2) Files are handled systematically and, hence, there are less chances of their being mislaid or lost.

3) When work flows in a straight line, the need for messenger services is lessened.

4) It keeps executives and clerks at their desks.

4.7.1 Problems in the Flow of Work

It is not easy to achieve a smooth flow of work in actual practice for several reasons. It may be obstructed or interrupted by any of the following factors:

1) **Unequal flow of work:** Flow of unequal volumes of work on different days or seasons may come in the way of smooth flow of work. For example, there may be greater incoming mail in the mornings and on Mondays. Similarly, work in financial institutions and government organisations is heavier towards the end of the accounting year.

2) **Interruptions to work:** Interruptions to work occur in offices on account of internal as well as external factors. Internal interruptions may be caused by

(i) lack of material/equipment with which to work, (ii) lack of required information, (iii) changes in methods c. work because of a change in plans, (iv) frequent calls from superiors, (v) idle talks between employees, and (vi) carelessness of employees. External interruptions may be caused by (i) visitors, (ii) telephone calls, (iii) external noise, and (iv) absenteeism.

3) **Unequal time requirements:** Quite often, different operations require different times for their completion and this difference, for example, may be from 2 minutes to 5 minutes. If the clerk in charge of the first operation takes five minutes to complete it and the second one takes just one minute, the clerk in charge of the latter will have to sit idle for four minutes. It is necessary, therefore, to study the job operations systematically and allocate the same to employees so that idle time may be kept under control.

4) **Improper work standards:** If the amount of work to be done by different employees of the same rank is unequal, the person who is burdened with a greater load of work will apply brakes to the flow of work. It is, therefore, necessary to standardise workload for all employees in the office.

5) **Unsystematic planning and scheduling:** In the absence of systematic planning and scheduling, less important work may be taken up ahead of more important work. This may ultimately affect the smooth flow of work.

6) **Poor layout:** Improper allocation of space to various departments also affects the flow of work adversely. If the layout is faulty, i.e., where work has to pass through wrong or unnecessary points, it would be difficult to achieve a smooth flow of work. Operations in such a case will move through a circuitous route, causing delays and interruptions.

4.7.2 Use of Flow Charts

With a view to overcoming the difficulties in the flow of work described above, flow of work should be analysed carefully. Flow charts are employed for this purpose. A flow chart shows the actual flow of work in an office. The basic

Figure 3.1: Flow Chart of Outgoing Mail Section in an Office
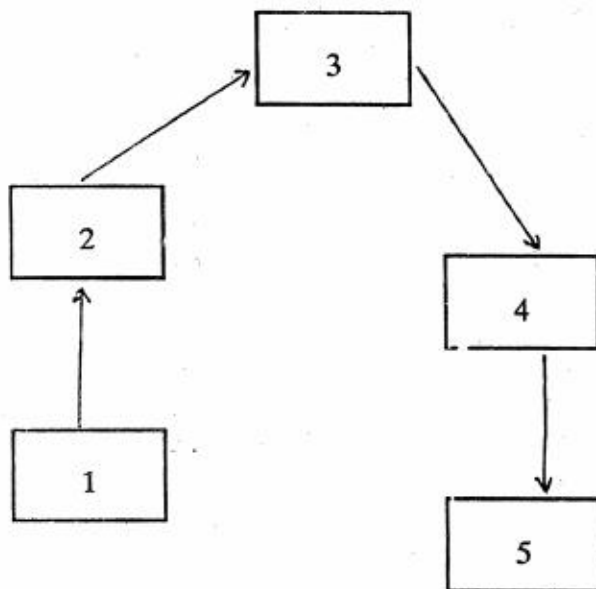
1. Correspondence Section
2. Typing Section
3. Registering Section
4. Despatch Section
5. Filing Section
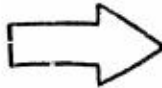
purpose of preparing flow charts (also called routine charts or process charts) is to ascertain whether the flow of work is ideal or there is scope for improvement. There are three types of flow charts for such an analysis, which are discussed below:

1) **Office Layout Chart:** The office layout chart is meant to depict the movement of personnel and work for each office activity. In this chart, lines are drawn to show the movement of office forms and documents from point to point or operation to operation. A separate chart is prepared for each system and all such charts are compared to find out wasteful steps, time, energy and money. These charts are prepared for those operations which occur frequently. An example of the office layout chart depicting the movement of work in Outgoing Mail Section of a large organisation is given in Figure 3.1.

2) **Flow Process Chart:** Also known as 'work simplification chart'. The flow process chart is prepared to analyse office systems and procedures graphically. Standardised symbols, as shown in Figure 3.2, are used to depict the flow of work under a specific system.

Figure 3.2: Chart Showing Standardised Symbols Used for Flow of Work in a System

ACTIVITY		SYMBOLS USED
OPERATION	◯	Denotes that something is being changed, added to, or created.
TRANSPORTATION	⇨	Indicates movement from one place to another.
INSPECTION	▢	Denotes an inspection when something is checked or verified but not changed.
DELAY	D	Indicates an interruption or delay in the flow of the subject being studied.
STORAGE	▽	Denotes the storage of an object, as when it is protected against unauthorized removal.

Where any office system or procedure is found to come in the way of flow of work, it is suitably changed or improved. The ultimate aim of the flow process chart is to simplify work and, that is why, it is known as 'work simplification chart'.

3) **Management-type Flow Chart:** In this chart, each step involved in a particular procedure is described through a short sentence written horizontally. Where a large number of steps are involved, they are numbered and explanations given in the form of footnotes. The chart is read from left to right and is useful to the management for reference purposes.

Check Your Progress C

1) State whether the following statements are True or False.
   i) Flow of Work refers to the way work moves from one operation to another.
   ii) Straight-line flow of work involves many backward movements.
   iii) Interruptions to work occur in office on account of external factors only.
   iv) A flow chart shows the actual flow of work in an office.
   v) The office layout chart is also called 'work simplification chart

2) Fill in the blanks.
   i) .... movements entail loss of time.

ii) It is not easy to achieve a .... flow of work in actual practice.

iii) If the layout is .... it is difficult to achieve a smooth flow of work.

iv) .... symbols are used in preparing flow process charts.

v) Management-type flow chart is read from .... to ....

4.8 LET US SUM UP

A system is a planned way of doing a particular work. Each system consists of procedures for major phases of work. A procedure is a planned sequence of operations for handling recurring jobs in a uniform manner. An operation is the smallest step in a procedure. There is a method for performing each operation within a procedure. A method is the manual or mechanical means and devices by which each operation is performed. Modern offices invariably use a number of systems, procedures and methods with a view to ensure efficient and economical performance of office work.

The use of systems and procedures helps an organisation to achieve a smooth flow of work, apply uniform solutions to repetitive work, avoid wasteful motions and delays, fix responsibility for results, help the staff to learn the intricacies of jobs, and coordinate the activities of various departments. On the negative side, the presence of systems and procedures may stifle employee initiative. Procedures might be applied in a rigid way, leaving no room for employee discretion.

The office systems and procedures are provided to employees in the form of a handbook called 'office manual'. It communicates information regarding the policies, functions, systems and procedures of an organisation to all employees in a convenient manner. As a result, everyone in the organisation is aware of what to do and when. Various types of manuals are employed in modern offices, depending on the need to provide elaborate instructions to employees on various matters.

While planning the systems and procedures in an office, it is necessary to ensure a straight-line flow of work, involving as few backward movements as possible. Usually, a number of problems come in the way of flow of work, viz., poor layout, unsystematic planning, improper work standards, etc. These problems could be avoided if office work is analysed properly through flow charts, such as office layout chart, flow process chart, and management-type flow chart.

4.9 KEY WORDS

System: A planned way of doing a particular work.

Procedure: A planned sequence of operations for handling recurring jobs.

Operation: The smallest step in a procedure.

Method: The manual or mechanical means by which an operation is performed.

Office Manual: A document in the form of handbook of information regarding office systems and procedures.

Flow of Work: The way in which work moves from one operation to another.

Flow Chart: A chart showing the actual flow of work in an office.

4.10 ANSWERS TO CHECK YOUR PROGRESS

A) 1) (i) True (ii) False (iii) False (iv) False (v) True

   2) (i) operation (ii) procedures (iii) interdependent (iv) sequence (v) manual, mechanical (vi) operation

B) 1) (i) True (ii) False (iii) False (iv) True (v) False (vi) True

   2) (i) planning (ii) routine (iii) identical (iv) flexibility (v) compliance (vi) outgoing

C) 1) (i) True (ii) False (iii) False (iv) True (v) False

   2) (i) backward (ii) smooth (iii) faulty (iv) standardised (v) left, right.

4.11 TERMINAL QUESTIONS

1) What do you mean by 'office systems'? Discuss the advantages of a sound office system.

2) Office systems, procedures, methods and routines are interchangeable terms. Do you agree with this statement? Explain why.

3) Give a few important systems that you know of that may exist in a modern office.

4) What do you understand by office systems and procedures? Discuss the advantages and limitations of office systems?

5) What is an office manual? Discuss the importance of an office manual.

6) Write short notes on
   i) Organisation Manual
   ii) Policy Manual
   iii) Employee Manual
   iv) Procedures Manual

7) What do you understand by flow of work? What are the common difficulties that come in the way of an ideal flow of work?

8) If you were the office manager, how would you analyse the flow of office work?

9) Briefly explain the following:
   i) Office layout chart
   ii) Flow process chart
   iii) Management-type flow chart

> Note: These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

SOME USEFUL BOOKS

Arora, S.P. 1990, *Office Organisation and Management*, Vikas Publishing House Pvt. Ltd., New Delhi.

Chopra, R.K. 1986, *Office Organisation and Management*, Himalaya Publishing House, Delhi.

Mills, Geoffrey and Standingford, Oliver, 1984, *Office Administration*, Pitman Publishing Ltd., London.

Reddy, P.N. and Appannaih, H.R. 1990, *Office Organisation and Management*, Himalaya Publishing House, Bombay.

Singh, S.P. and Singh, B., 1987, *Office Management and Secretarial Practice*, Gyan Publishing House, Delhi.

Uttar Pradesh
Rajarshi Tandon Open University

AOCOM - 01
Office Organisation
andManagement

Block

2

RECORDS MAINTENANCE AND MAIL SERVICES

BLOCK 2 RECORDS MAINTENANCE AND MAIL SERVICES

You have learnt the working of various office equipments and data processing in Block 1. Another important area in office management is the records maintenance and mail services. This Block consisting of 5 units deals with various aspects of the filing system. It also explains handling of inward and outward mail and the office communication.

Unit 5 deals with the principles and functions of records management, filing procedures and methods of filing.

Unit 6 explains importance and objectives of indexing, types of index and the retention and disposal of files.

Unit 7 explains the importance and organisation of mail service, various stages of handling inward and outward mail and various equipment for mail handling.

Unit 8 deals with the types, forms and the means of internal communication.

Unit 9 explains the types and forms of external communication, production of correspondence and methods of external communication.

UNIT 5 FILING SYSTEM

Structure

5.0 OBJECTIVES

After reading this unit, you should be able to :

• explain the importance and functions of records management

• identify the elements, objectives and functions of filing

• explain the advantages and essentials of a good filing systems

• enumerate different bases of classification of files

• outline the filing procedure

• distinguish between horizontal and vertical filing, their relative merits and demerits

• outline the advantages and disadvantages of the centralisation and decentralisation of filing

• describe the main features of different types of filing equipments alongwith their uses and importance.

5.1 INTRODUCTION

A modern office acts as an information centre. It is a place where information is collected, processed, stored and made available for the conduct of business activities of an organisation. The volume of paper work handled in a modern office today is enormous. Hence records management has also become highly important. Filing constitutes the core of records management. It serves as an important aid to office

management in general and records management in particular. In this unit, you will learn the meaning and the nature of different types of filing systems, the procedures involved and equipments required for filing. You will also learn the objectives and essential qualities of a good filing system as well as the relative advantages and disadvantages of centralisation and decentralisation of filing.

5.2 IMPORTANCE OF RECORDS

The term 'Record' refers to **"any written matter or document prepared for possible future uses"**. It may take the form of a letter, notice, circular, invoice, voucher, picture, chart, diagram, report, return or statement, registers, books of accounts, even tapes and micro-films.

A record constitutes some type of tangible evidence of the operations or transactions of an enterprise. It refers to the bulk of correspondence, registers, books, and other documents which are created, received, stored and used in any business office. Records constitute the memory of the entire organisation.

Types of Records : There are different types of office records which are categorised in Figure 5.1. at Page 7

Importance of Records: Office services rendered to business in various functional departments depend essentially on the activities like preparation, storage and availability of a large variety of records as shown in the above chart..For the planning, policy-making, co-ordination and control functions. management can be provided necessary information only if past and present records are properly classified and preserved so as to be located promptly as and when needed. It is rightly said that a business decision is only as good as the fact or information on which it is based. Hence, records must be maintained systematically, preserved with due care, and made available to the management with the required speed and accuracy.

Arising out of the usefulness of information in management the importance of office records may be outlined as follows.

i) Taken together records serve as a memory unit of the office.

ii) Records provide necessary data for managerial planning and policy-making of the business.

iii) The objective evidence of the business transactions preserved in records can be used for legal purposes, if needed.

iv) Compliance with legal and statutory requirements (such as maintenance of books of accounts and registers for a specified period) is facilitated.

v) Records in the form of summarised statements can be available to ascertain the financial health of business at a glance.

vi) Records constitute the database for MIS — Management Information System.

Check Your Progress A
1) Which of the following statements are true and which are false
    i) Office records include only letters, notices and circulars.
    ii) Books of accounts do not form a part of office records.

2) Fill in the blanks :
    i) Records provide tangible .... of transactions.
    ii) Leave records form a part of .... records maintained in the office.

5.3 RECORDS MANAGEMENT

Records management refers to management control of records. It includes all

Figure 5.1: Different types of office record

TYPES OF RECORDS

Correspondence Records	Accounting Records	Purchases & Sales Records	Personnel Records	Legal Records	Administrative Records	Miscellaneous Records
1. Letters	1. Invoices	1. Quotations	1. Applications	1. Registers	1. Licenses	1. Office Diaries
2. Notices	2. Vouchers	2. Price List	2. Bio-data	2. Returns	2. Ins. Policies	2. Visitors' Books
3. Circulars	3. Receipts	3. Samples	3. Reports	3. Statements	3. Agreements	3. Advertisement Copies
4. Memos	4. Journals	4. Orders	4. Complaints	4. Minutes	4. Contract	4. Questionnaires
5. Telegrams	5. Ledgers	5. Advices	5. Memos	5. Resolutions	5. Certificates	5. Survey Reports
6. Telex messages	6. Bank statements	6. Challans	6. Replies			6. Masters of Used Stencils etc.
	7. Pay-rolls.		7. Attendance			
			8. Leave Records.			

Thus, it involves preparation, classification, and storage of records and making records available as and when required. A sound system of records management is one in which proper methods and procedures are applied, and in which records are protected, are easy to find, not unduly space consuming, and are not retained beyond their usefulness. In short, records management is concerned with the creation, distribution, maintenance, retention, preservation, utilisation and disposal of records.

Objectives of Records Management

The main objectives of records management are the following :

i) **To keep an orderly account of progress:** The purpose of preparing and *preserving records* of business transaction is to enable management to check on the progress of business. It is referred to as the historical function of records.

ii) *To facilitate preparation of statements regarding the current business* **position:** At any point of time, the business position can be known only by means of up to date records. This is of vital importance in business planning particularly in the context of changing conditions both within and outside the organisation.

iii) **To facilitate comparison:** Records facilitate comparison of the results of business activities between one period of time and another, between one line of product and another and also between the firm and its competitors. This is known as the analytical function of records.

iv) **To detect inefficiency and wastage of resources:** Inefficiency of operations and waste of resources can be detected and controlled only with the help of record data made available to managers. It may be regarded as the control function of records.

v) **Legal formalities:** Certain records are necessary to be preserved for the specified periods of time under the provision of various laws, e.g. sales records as per the Sales Tax Act, Books of Accounts as per the Income Tax Act, etc.

vi) **To establish the genuineness of facts in dispute:** Records serve as proof of transactions and can be used as evidence the support of arguments in disputes or law suits.

vii) **To ensure availability of information speedly and in form:** Records to be useful must be promptly located and made available when required.

5.3.1 Principles of Record Keeping

Record keeping is an important aspect of records management. It has been found useful in making preservation of records,

i) **Safety:** The records should be preserved safely to prevent mutilation, loss or misuse.

ii) **Period:** Records should be preserved only for the period for which they are useful.

iii) *Economy: Creation and storage of records* should be economical in terms of equipments used and space occupied.

iv) **Flexibility:** Filing system should be flexible enough to permit desirable changes from time to time.

v) **Classification:** The records should be classified on suitable bases (alphabetical, geographical, numerical, or combined basis) so as to satisfy the purpose of classification in accordance with the organisational needs.

vi) **Justification:** Reputation of records must be justified by reference to costs involved and purpose to be served.

vii) **Verification:** To ensure that records are accurate and authentic they must be verified from other evidences.

viii) **Accessibility:** Records must be available easily and quickly when required by the office executives.

ix) **Simplicity:** The equipment used and methods of operation should be simple to understand the easy to remember and handle.

5.3.2 Functions of Records Management

The functions of records management are as follows:

1) **Creation of records:** It refers to development and design of new forms and records and their control. It should be noted that the new forms are developed only when the deficit need for such arises. This stage is also concerned with the development of efficient methods of entering data in the documents. For how long the records should be stored is also determined at this stage.

2) **Storage of records:** This stage is concerned with the storage of records at a place which is accessible to the persons using them and protection of records against theft, fire, unauthorised use and deterioration.

3) **Retrieval of records:** It involves locating the desired records for information and when the purpose is accomplished they should be kept back in their files within a reasonable time. All the documents taken out from the files should be signed.

4) **Utilisation of records:** This stage refers to the development of efficient procedure through which the records move. Efficient utilisation of records depends largely on the quality with which the information is entered into records. The point is that the desired records may be retrieved and delivered to the desired place in time.

5) **Disposition stage:** This stage particularly deals with preserving important and necessary documents and disposition of those records which are unnecessary and are no longer required by the organisation. This stage also deals with the shifting of the records from high cost storage areas to low cost storage areas.

5.3.3 Records Manual

For effective implementation of a programme of record keeping it is advisable to prepare a Records Manual which should be approved and updated periodically. It should be made available to all members of the office staff, who need to deal with office records. The contents of the records manual generally are as follows:

i) Objectives of Record-keeping
ii) Statement of the Records policy
iii) Organisational structure of the Records Dept.
iv) Filing system in use
v) Records Retention Schedule
vi) Indexing system applied
vii) Procedure for the Disposal records
   (including their transfer and micro-filming)
viii) Periodic Review and Evaluation of the programme

Check Your Progress B

1) What does records management mean?

....
....
....
....
....

2) Which of the following statements are true and which are false?
   i) The only objective of records management is to ensure the availability of information for managerial decision-making.
   ii) Records facilitate compliance with legal formalities.
   iii) Records management has nothing to do with creation of records.
   iv) Record keeping is mainly concerned with storage and protection of records from loss or damage.
   v) Records must be verified as regards accuracy before storage.
   vi) Procedure for disposal of records and the retention schedule should be laid down in the Records Manual.
   vii) Records should be destroyed if they are no longer useful.

5.4 ELEMENTS OF FILING AND FILING FUNCTIONS

Office records have to be preserved for the present and future reference. Filing refers to the system of keeping records in proper order. Papers and documents filed properly ensure their availability for the possible uses or references at some future date. Filing provides a means of preserving records of business transactions. It involves keeping of records in a systematic manner.

Filing may be defined as the process of arranging and storing records so that they can be located whenever required. It means placing of documents and records of different categories systematically that is, classifying, coding, arranging and placing the records in storage, so that they may be found and delivered when needed for future reference.

Elements of Filing

An analysis of the above definition reveals the following essential elements of a filing system :
i)   Logical classification or sorting the records.
ii) Systematic arrangement of the records.
iii) Keeping the records in suitable containers or in the form of magnetic tapes, micro-films etc.
iv) Identification and location of the papers as and when required.
v)   Withdrawal and delivery of the papers required.

Functions of Filing

Filing is the systematic preservation of business records so that they may be found and delivered quickly whenever needed in future. Look at Figure 5.2 which exhibits the functions performed by filing.

Figure 5.2 : Functions of Filing

FUNCTIONS OF FILING

Historical Function	Library Function	Administrative Function	Information Function
Preserves past records	Collects and maintains records for references	Aids the executives in policy and decision-making	Preserves and provides ready information

5.5 OBJECTIVES AND IMPORTANCE OF FILING

Filing has the following main objectives:
i)   **To arrange records properly:** It aims at classifying and arranging different types of office records. Therefore, it calls for suitable bases or criteria for sorting out and classifying office papers or records from time to time.

ii) **To store records safely:** It aims at protecting office papers and documents from possible losses or damages. So it requires the use of strong, protective filing cabinets and equipments.

iii) **To make records readily available:** It aims at providing office papers to executives and assistants for all possible uses and references. It is the basic objective of filing because it aids and assists management in policy-making and taking decision in connection with business activities.

iv) To save time, money, efforts and space required for the storage of records.

v)   To improve the efficiency of office operations.

Filing which is concerned with systematic arrangement of records may be regarded as the core of record management. It plays a very significant role in modern organisations. Records are the sources of information used for various purposes, which can be best served by the filing system. Indeed, the importance of filing has increased in modern times due to a number of factors, e.g.

i) Increasing volume of the paper work.
ii) Increasing complexities in business activities.
iii) Need for systematic arrangement of various office records which are essential for continuing business operations.
iv) Higher rate of reference to past records, including letters, invoices, bills, etc.
v) Need for providing documentary evidences in law suits and other.
vi) Application of modern management methods involving greater use of factual data for decision making.
vii) Multiplicity of statutory requirements which necessitate submission of statements and returns of various kinds at regular intervals.

5.6 ADVANTAGES OF FILING

An efficient system of filing provides a number of advantages or benefits to the office staff as well as the organisation which may be enumerated as follows :

i) **Protection and safety of records :** Filing ensures protections of office records against possible losses or damages caused by the dirt, dust, fire, theft, etc.

ii) **Ready reference :** Records contain information, and files act as the store house of information facilitating quick and easy reference to the past and present activities of business.

iii) **Documentary evidence :** Records constitute official and legal evidence which can be produced in case of disputes in a court of law. Filing facilitates evidencing.

iv) **Prompt correspondence :** Filing enables handling of correspondence effectively and expeditiously. It helps in securing orders and in building up commercial reputation of the firm.

v) **Increased efficiency :** Filing increases efficiency of the office in the discharge of its various functions by providing necessary information promptly and in proper form.

vi) **Better planning and control :** Filing aids and assists office management in better planning and control of business activities by providing timely information.

vii) **Statutory requirements :** Statements and returns can be duly filed in compliance with the provisions of various laws, like the Factories Act, Companies Act, Income Tax and Sales Tax Acts, and so on.

viii) **Review of progress and comparison :** Files contain past records which can be reprieved so as to facilitate review of progress of business in various respects. In addition, it makes unit-wise, product-wise and period wise comparison possible.

5.7 ESSENTIALS OF A GOOD FILING SYSTEM

A good filing system is one which can provide accurate, ready, uptodate information promptly at proper time. Following are some of the essential requisites of a good system. :

i) Safety : A filing system must provide for necessary safety of the office records by way of protection against possible loss or damage by dirt, dust, water, fire, theft, etc.

ii) **Classification :** The filing system must be supported by suitable classification bases so as to facilitate inclusion as well as location of documents/papers in the

relevant files. There are several methods of classification such as alphabetical, numerical, alphanumerical. geographical or subject-wise from which choice may be made.

iii) **Suitability** : The nature and volume of office records differ from one firm to another. The filing system must be suited to the goals and needs of the organisation.

iv) **Simplicity** : The filing system should be easy to understand and simple to operate with minimum need for training, knowledge or experience of the filing process.

v) **Accessibility** : The required papers/documents should be available easily and quickly to the officers concerned.

vi) **Flexibility** : The filing system should be flexible enough to be adaptable to internal and external charges in business as also changing volume of paper work.

vii) **Cross referencing** : Many times it may be possible to file some papers under two different heads. In such cases, cross references should be given in such files where the papers are not filed in order to trace their location.

viii) **Movement (or Out Guides)** : Wherever and whenever any document is removed from a folder or file, or a file is removed from its place or location, 'Out guide or Indicator' should be inserted, mentioning to which officer, section or department it has been issued and for which duration.

ix) **Indexing** : There must be an index of files and documents to ensure quick location of papers required.

5.8 CLASSIFICATION OF FILES

Files containing records and documents should be given proper titles and classified on some basis so that they may be referred to easily and quickly. The main objective of classification or grouping of files of records is to make them conveniently available. There are different bases of classification. They are briefly explained below:

i) **Alphabetical classification** : It is the simplest method of classification in which folders containing letters from correspondents or paper relating to subjects are arranged according to the first alphabet with which the name or (surname) of the correspondent or title of the subject begins. The folders are arranged in strict alphabetical order of the names or surnames of customers or suppliers or the title of the subject. Thus, for example, all the folders of customers having surnames beginning with A are placed in one group, and similarly for those begining with B, C, D, etc. form separate groups. Several names beginning with an alphabet (say A) can be arranged in the dictionary-like alphabetical order e.g. A, AB, AC & so on.

Merits : i) It is simple to understand and easy to operate the arrangement ii) No separate index is needed under this classification. iii) Addition of new files is possible without disturbing the order of classification.

Demerits : i) It is time consuming and so speedy operation is not possible. ii) It may lead to congestion in the filing section. iii) Misfiling may take place due to wrong spelling of words or names. iv) It is difficult to forecast the space requirement with this method of classification.

2) **Numerical Classification** : Under this method, each customer or supplier or subject is allotted a number. All papers are placed in one folder bearing the distinctive number so allotted. The folders are arranged in the cabinet in the numerical sequence and guide cards are used to divide them into suitable groups of 10 or 20, e.g. if a supplier is allotted the number 101, all his papers will be located in file No. 101. The numerical filing may be combined with the alphabetical system, e.g. A-1, A-2, A-3 & so on, and the files kept in this order. It is called 'Alpha-numerical filing' which is more flexible than the alphabetical or numerical filing.

Merits : i) As the folder number is also the reference number, location becomes easy and chances of misfiling are reduced. ii) There is scope for expansion of files.

Demerits : i) It requires an alphabetical index to be maintained. ii) It is expensive in terms of cost and space. iii) Filing miscellaneous papers becomes difficult. iv) There may be gaps in serial number as dead files are eliminated. v) Mistakes in numbering and misfiling may occur.

3) **Geographical Classification** : Under this method, the records are kept in files for different regions or areas of operation. The customers or suppliers are classified according to the geographical areas or regions, and their files are maintained in the alphabetical or numerical order.

Merits : i) It is most suitable where it is desirable that records should be maintained by territories or geographical area. ii) It ensures speedy location and is both time and labour saving. iii) It is often essential for maintaining sales records or customers accounts.

Demerits : i) Knowledge of the division of zones and geographical locations are essential otherwise there may be misfiling. ii) A separate index is required for easy and quick reference.

4) **Chronological Classification** : Under this method, the papers are filed date-wise in a sequence as and when business transactions take place.

Merits
i)   It is simple and easy to understand.
ii) It is found to be suitable for filing correspondence.

Demerits
i)   It is useful only for small business firms.
ii) For large firms it is to be supported by other bases of classification.

5) **Subject-wise Classification** : Under this method, records are classified according the subject matter of papers. Since, the volume of papers for such broad subject may be large, the papers grouped into subclasses and placed in sub-folders, which are arranged in alphabetical order. To take one example, there may be one folder for the main subject (say) Advertising (General) and separate sub-folders each for Advertising (Newspapers), Advertising (TV), Advertising (Agencies employed), etc.

Merits
i)   Subject classification is most useful where subjects are important, e.g. Builders and construction firms, architects, etc.
ii) It is easy to operate if the number of sub-folders with each main folder is small.

Demerits
i)   A separate index may be needed.
ii) It requires training of filing clerks in the filing process, as sub-classification of each subject may be somewhat complicated in nature.

Choice of a Method of Classification

While selecting a suitable basis of classification, the following points should be taken into consideration :
i)   Size of the firm and scale of its operations.
ii)   Volume of paper work.
iii) Frequency of reference requirements.
iv)   Degree of flexibility desired.
v)   Extent of simplicity expected.
vi)   Convenience as per the organisational pattern.

5.9 FILING PROCEDURE OR ROUTINE

Proper filing is necessary to avoid misfiling that is misplacement of papers. Filing routine consists of

i) Receiving the papers or documents and placing them in the relevant files.

ii) Issuing papers or documents needed for use or references and re-filing them.

Following are the different steps involved in the filing routine and procedure.

i) **Instructions for filing** : Some responsible officers issue the order for filing papers. He will write the word 'File' on the papers to be filed, sign and put the date.

ii) **Classification** : The papers or documents to be filed must be classified on the approved bases i.e. alphabetical, numerical etc. It should be done by a trained clerk to a cold misfiling.

iii) **Indexing and Coding** : The filing clerk will then put a code number on the paper to be filed so as to indicate the particular head under which it will be filed.

iv) **Cross Referencing** : Where paper relates to more than one file, a cross-reference sheet or and sacu. be prepared and inserted in every other file for quick referencing. Alternatively clplicate true copies of the paper may be filed in the relevant files.

v) **Charging out** : Whenever a paper or file is needed by an officer, he will issue a requisition slip on the receipt of which the filing clerk prepares a 'charge out slip' (or out-slip or out-guide) indicating the withdrawal and whereabouts of the paper or file.

vi) **Follow-up** : Some documents like purchase orders or bills for payment, etc. require follow-up action. The concerned officer notes down the follow-up instructions. The filing clerk then prepares 'a falow-up slip' or 'a tickler' and attacces it to the relevant paper or file. The original paper is filed in the usual way and the follow up slip is maintained in a separate 'follow-up' file. An extra copy of the paper may also be kept in the 'folow-up' file as a reminder. The filing clerk sends the paper or file to the con enned officers on the specified date for necessary decision and action.

vii) **Disposal of Dead files or Papers** : Some files or papers become obsolete or useless after the lapse of a certain period. The office manager should look into such papers/files and pass suitable orders for their disposal or destruction. Retention schedules and other instructions given in the records manual generally indicate the procedure to be followed for that purpose.

viii) **Micro-filing** : When some important office records have to be preserved or retained for a very long duration, they may be microfiled. Micro-filming is the process of reducing or condensing a mass of data in reels of film.

Check Your Progress C

1) Define 'filing'.

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2) List the elements of a filing system

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....

3) Which of the following statements are true and which are false?
   i) Alphabetical classification of files is based on the same principle that a dictionary complied.
   ii) Numerical classification of files does not require a separate index.
   iii) Chronological classification is not suitable for filing correspondence.
   iv) Orders for filing papers must be issued by responsible officers.
   v) A 'charge out slip' is prepared whenever any file is needed by a manager.

5.10 FILING METHODS

The old or conventional methods of filing (like metal holders, bound or guard books, spike and concertina filing, box filing, etc.) are not of much use now due to their limited capacity. Several improved filing methods have been developed to meet the growing needs of modern business houses. These are (1) Horizontal filing (2) Vertical filing.

5.10.1 Horizontal Filing

Under this method of filing papers are placed in folders and the folders one kept in horizontal position. Folders or files containing papers are kept in drawers one upon the other and the papers are inserted in the order of date on which received or despatched. Naturally, the latest papers are found at the top. An index is prepared allotting numbers to the files. Guide cards may also be horizontally kept showing the movement of files.

Types of Files : The types of files which may be used in horizontal filing are briefly explained below :

i) **Flat files :** These are covers made of cardboard or thick paper fitted with metal hinges for fastening the papers together. A file is allotted to each customer or subject. All papers—letters, replies, etc.—relating to the customers or subject are placed in that file in chronological order. (i.e. date-wise). The papers are punched and then inserted in the metal hinges of the file. These files may be kept in almirahs or drawers.

ii) **Arch Lever files :** These files are made of thick cardboard and are fitted with strong metal arches operated by level (double spring). When a paper is to be filed, it is punched and inserted by moving the lever upward and then pressing it down. The papers in the file lie flat, i.e. one upon the other. Due to the lever arch system, there is no need to take out any other paper, than the one required. These files are commonly used in offices, being simple, cheap and convenient for filing large numbers of invoices, delivery notes, letters, replies, etc. Look at Figure 5.3 which shows the Arch lever file.

Fig. 5.3: Arch lever file

Advantages of Horizontal filing

Following are the main advantages of horizontal filing.

i) It is simple to understand and easy to operate.
ii) It is relatively cheaper method.
iii) The number of files can be increased or reduced depending on the volume of papers.
iv) It enables easy reference as the papers are filed in chronological order.
v) Papers can be inserted or taken out without disturbing the order of other papers.
vi) There is very little risk of loss or misplacement.

Disadvantages

There are certain disadvantages of horizontal filing which are as follows :

i) It is not suitable where the volume of papers is very large.
ii) It requires relatively more space.
iii) In the event of expansion in the volume of papers, the drawers must be reorganised which is troublesome.
iv) Location of the exact paper at short notice is difficult as the files containing papers are placed one above the other.
v) To take out any paper from a flat file other papers have to be removed first. This disadvantages does not exist in arch lever files.

5.10.2 Vertical Filing

Under this method, all papers, folders and files are kept in a vertical or standing upright positions. Here the papers or letters are not fastened unlike in horizontal filing. Vertical filing is useful especially in large scale business organisations.

Equipments used

The equipments required in vertical filing are of two types :

Folders

They are made of manila or some other strong paper. They are used to hold papers and documents. The back of the folder (i.e. tab) is slightly higher than the front. The extended back of the folder is used to write the subject title of the file and its contents. When folders are placed in the cabinet the extended edges are visible in a sequence so that the contents are easily readable. Papers placed inside the folders are not fastened together. Its advantages is that papers can be easily filed or taken out. But papers may get folded and creased. Usually for each subject or for a group of subjects, a separate folder is maintained. The contents of each folder should be indexed chronoiogically or by some other suitable method, so that easy location of a paper is possible. These folders may be with or without clips or Holders The folders without clips are better because the papers can be put into and taken out without disturbing the order of the remaining papers.

Cabinets

Vertical filing cabinets are made of wood or steel. They are fitted with a number of drawers. The drawers in these cabinets run on ball bearings and are deep enough to hold the folders in a standing position. A drawer may contain upto of 200 to 300 folders. A cabinet may be divided into parts alphabetically or numerically. Guide cards are inserted at appropriate places to make location of a file or folder easier. Out guides indicate the withdrawal of files or folders and their outside location. New files can be inserted at appropriate places in the cabinets.

Vertical filing cabinets may be provided with detachable sides in order that more drawers may be added, later on if necessary. The cabinets are fitted with locking devices by which secrecy can be maintained security provided against theft or a misuse. Steel cabinets are costlier than wooden cabinets. But they are more durable and give a better look to the office. Look at Figure 5.4 and Figure 5.5

where vertical filing cabinets have been shown. Following are some of the advantages of filing cabinets:

i) A single cabinet with four drawers can accommodate 1000 folders approximately. Thus, it enjoys very large filing capacity.
ii) There is economy of space in the office.
iii) Filing cabinets are fitted locking devices. Fire-proof cabinets are also available. Thus better safety and security are ensured.
iv) Any kind of classification can be adopted for the arrangement of folders in the cabinet.
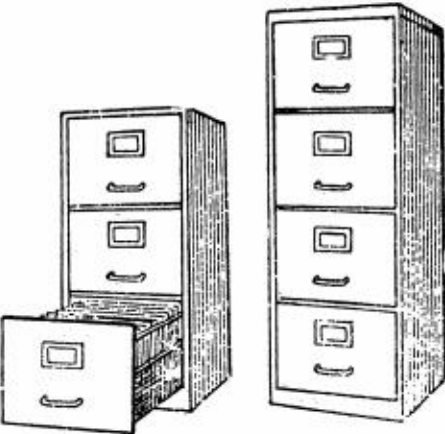
Figure 5.4: Vertical filing cabinets.   Figure 5.5:Cabinet Drawer with Folders.
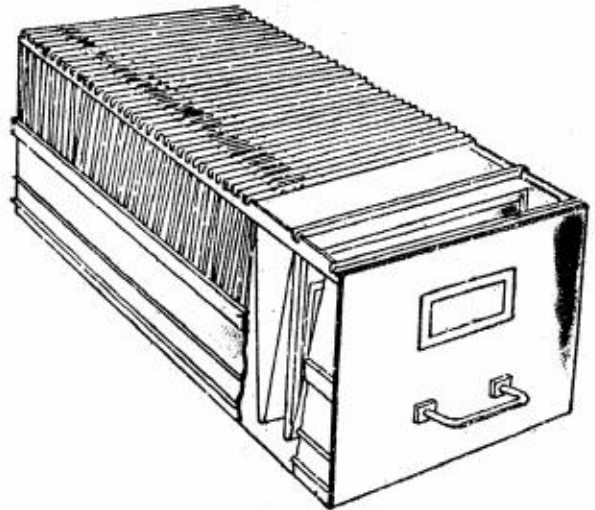
Advantages of Vertical filing

The advantage of vertical filing are as follows :

i) It facilitates ready reference and thereby saves time and effort.
ii) Files are easily accessible and can be referred to, inserted in, or withdrawn easily and quickly.
iii) It is economical to use as a large number of folders when vertically arranged can be accommodated in drawers.
iv) It provides ample scope for expansion.
v) It ensures safety and security of the office records by means of locking devices.
vi) It is readily adaptable to the changes in classification as the folders can be arranged alphabetically, numerically, or geographically.
vii) It has wide applicability as it can be used for all types of papers and documents, e.g. orders, invoices, quotations, tenders circulars, etc.

Disadvantages : Following are some of the disadvantages of vertical filing :

i) There is possibility of the folders slipping down or sagging lower down the drawers out of sight. This problem may be overcome by means of a device where in folders are fitted with bars or books which enable them to be suspended from rails along the sides of the drawers.
ii) It needs to be supplemented by the use of flat flies for movement of papers from dealing assistants to one or more officers in connection with current matters.
iii) Papers loosely inserted in folders may be misplaced in wrong folders unless it is done carefully.

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	Points	Horizontal Filing	Vertical Filing
1.	Arrangement of papers/files.	In the flat position i.e. one upon the other	In the stanc upright position
2.	Filing equipments	i. Flat files ii. Arch Lever files	i. Folders ii. Cabinets
3.	Misplacement of the papers	Not possible as papers are fastened by a clip	Possible as the papers are kept in loose manner
4.	Cost Element	Economical, as only file covers are necessary	Costly, as it requires, folders, drawers, guide cards, cabinets cupboards.
5.	Flexibility	Not flexible, having limited scope for expansion	Flexible as it enjoys scope for expansion
6.	References	Not easy and quick	Easy and Quick
7.	Protection of records	Limited protection	Maximum protection due to steel cabinets and almirahs with locking devices.
8.	Suitability	For small office	For big offices
9.	Requirements	Large space	Limited space.

5.11 CENTRALISATION AND DECENTRALISATION OF FILING

The papers documents and records in any business organisation can be filed at the departmental level or at the main office. The office manager has to decide whether filing should be centralised in the main office or decentralised that is, done in different departments. The filing function can be organised in any of the two ways. Both the systems of filing are discussed briefly below.

5.11.1 Centralised Filing

Under this system, all the records to different departments in the organisation are filed at a central location, which may be called Filing or Record Section under a chief record keeper. This system implies that individual departments in the organisation need not undertake their own filing work independently. Necessary filing equipments and personnel are located at the central place, which is easily accessible to all other departments.

Advantages : Centralised filing system offers the following advantages to the organisation :

i) **Specialisation :** Since filing is centralised the filing staff are trained and specialised in handling the filing activities. It improves, the efficiency and reduce the operational cost apart from providing better services.

ii) **Elimination of Duplication of records and equipments :** It eliminates the need for preparing a number of office copies of records. Also it eliminates the duplication of filing equipments like folders, cabinets, etc, with corresponding saving in costs.

iii) **Utilisation of Space :** It ensures optimum utilisation of office space, resulting in maximum economy of space.

iv) **Location of Records :** It facilitates easy and quick location of required papers, documents, letters etc.

v) **Easy Cross-Referencing :** Cross-referencing becomes easy because different records are kept at one central place. It improves the efficiency of the filing system.

vi) **Uniformity of Procedures** : Uniform work procedures can be followed. Consisting of uniform methods and equipments of filing.

vii) **Better Supervision and Control** : Centralised filing ensures better supervision and control over records retention, retrieval, transfer and disposal activities. Filing equipments are better utilised.

viii) **Relief to other Departments** : Operating departments are relieved of the filing work.

Disadvantages : Centralised filing suffers from the following drawbacks.

i) **Physical Difficulties** : Problem of space and distance from the departments may create physical difficulties with regard to services of centralised filing and may cause delay and inconvenience.

ii) **Lack of Secrecy** : Maintenance and handling of all at one place, may not permit secrecy of confidential matters to be preserved. This may adversely affect the interests of management.

iii) **Lack of Departmental Knowledge** : Central filing are not generally expected to have specialised knowledge of working. It may result in misfiling or misplacement of records, and neglect of relevant departmental papers.

iv) **Lack of Training** : Junior assistants in different departments do not get the opportunity of being trained in filing and record-keeping activities.

v) **Increased Staff Costs** : Centralised filing calls for recruitment of a separate officer and personnel which may increase office and administrative expenditure.

vi) **Functional Inefficiency** : Beyond certain limits functional efficiency may decline due to centralised administration.

5.11.2 Decentralised Filing

Under the system, filing is not done centrally at one place. Files relating to different sections or departments are maintained departmentally. Every department instals its own filing system, maintains separate equipment and allocates staff to look after the filing work. This system is also called **departmental filing.**

Advantages : Decentralised filing offers the following benefits:

i) **Easy Availability** : Papers needed are readily available in the respective departments. It thus saves time and effort.

ii) **Proper filing** : Departmental staff having knowledge of the nature of records, chances of misfiling or misplacement are minimised.

iii) **Lower staff costs** : Filing work may be allotted to the existing departmental staff. It may not be necessary to appoint separate filing staff. Office and administrative expenses may thus be relatively less.

iv) **Training of Juniors** : Juniors assistants in the different departments may be trained conveniently for work relating to filing, indexing, record-keeping, retention and disposal.

v) **Functional Efficiency** : Filing work carried out at the departmental level is on a small scale. Thus, it ensures functional efficiency.

vi) **Sectional Secrecy** : Secrecy of confidential matters or record can be preserved with greater assurance.

vii) **Suitability** : It is most suitable for large organisations where distance between the departmental offices and the main office may not permit quick availability of records from the central filing section.

Disadvantages : Departmental filing also suffers from the following drawbacks.
i) **Lack of Specialisation** : The organisation does not have the benefit of specialised services which can be provided through centralised filing.
ii) **Duplication of Filing Equipments** : Separate filing equipments (cabinets, almirahs, shelves, folders, files etc.) are required in each section or department. This adds to the cost of filing.

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iii) **Duplication of Records :** Duplication of records may be necessary particularly where the papers relate to more than one department or section. Use of additional office stationery and supplies leads to increasing office expenses.

iv) **Lack of Uniformity :** Different departments in the organisation may adopt different filing procedures and methods. Thus, standardisation of work procedure is not there.

v) **Space Requirement :** It calls for larger office space to be arranged for installing filing equipments in different sections or departments.

vi) **Lack of Supervision and Control :** Departmental filing does not permit centralised supervision and control of records management. Hence, coordination becomes difficult.

While choosing any one of the system, the office manager should take into consideration the following aspects of filing work.

i) Nature of activities of the organisation
ii) Scale of business operations
iii) Volume of paper work
iv) Availability of space and physical facilities
v) Availability of funds
vi) General and specific needs of various departments
vii) Managerial and administrative requirements.

Centralised Vs. Decentralised Filing

Sr.	Points	Centralised Filing	Decentralised Filing
1.	Location of filing work	In one central filing department	In different sections or departments separately
2.	References	Somewhat delayed	Easy and quick
3.	Specialised staff	Available	No available
4.	Uniformity	Possible	Not possible
5.	Space requirements	Limited	Larger
6.	Office costs	Relatively lower	Relatively higher
7.	Duplication of records and equipments	Can be avoided	Unavoidable
8.	Secrecy	Cannot be maintained	Can be maintained
9.	Training of juniors	Not possible	Possible
10.	Supervision and control	Better and effective	Loose and difficult

5.12 FILE COVERS AND CUPBOARDS

There are different type of filing equipments used in business offices. In horizontal filing, file covers and cupboards are widely used, which are briefly explained below :

5.12.1 File Covers

They are also known as the 'Flat Files'. They are made of card board or thick paper. A separate file cover is allotted to each customer, supplier or subject. It contains all the relevant papers, documents, and correspondence relating to an individual dealer, customer, or subject. All the papers are filed in chronological order (i.e. date-wise). The flat file or the file cover has metal hinges. The papers are inserted into the holes after punching by the punching machine. Now-a-days, plastic file covers are also available in different colours and sizes. File covers are cheaper relatively when purchased in bulk. The file covers are placed in almirahs or cupboards, or in drawers.

While using flat files or covers, the following steps should be taken.

i) Number and label the file covers according to the names of persons or subjects.
ii) Prepare an index of the file covers for easy and quick references

iii) Use out-guides or out markers for indicating the withdrawals of the file covers.

iv) Display the index outside the almirahs or drawers.

5.12.2 Cupboards

Cupboards, almirahs or shelves may be open or closed. File covers or flat files are placed in the cupboard one above another in the flat or horizontal position. The cupboards may be made of wood or steel. The number and sizes of cupboards required depend upon.

i) volume of paper work in the office

ii) availability of space, and

iii) availability of funds

It is advisable to have closed cupboards rather than open shelves or cupboards, closed cupboards offer the following additional advantages.

i) **Safety of records :** Records are protected from dirt, dust water or moisture. Thus it provides necessary safety.

ii) **Security of records :** With locking devices security or records can be ensured against unauthorised handling or records, theft, or pilferage.

iii) **Decent get up :** Closed steel almirahs give the office a neat and decent look.

In open shelves, filing may be done horizontally or vertically and any method of classification may be adopted. Open shelves are available up to the ceiling level (i.e. 9 to 10 feet) and ladders may be used by the operators. Folders, flat files or file covers can be stored in open shelves. Generally, the open (and also closed) shelves are used in private and public libraries. Open shelf filing offers all the advantages which are similar to those of lateral filing.

But open shelves require large space and dust-free area for record-keeping. Wooden shelves are somewhat less costly than the steel shelves.

5.13 USEFULNESS AND IMPORTANCE OF EQUIPMENTS

In modern times, filing equipments have become indispensable in every office. Efficient records management calls for necessary devices and equipments for filing. Necessary budget provision should be made for the purchase and installation of required equipments. The importance of filing equipments hardly needs to be over-emphasized. Their usefulness for records management is outlined below.

Usefulness : The practical usefulness of filing equipments mainly lies in the purpose they serve, e.g.

i) **Records preservation :** Office records can be preserved safely for a long period against possible losses or damages, from dirt, dust, fire, etc.

ii) **Space utilization :** Office space can be put to optimum use.

iii) **Sorting and filing :** Sorting and filing of records are not possible without filing equipments.

iv) **Available varieties :** Filing equipments of different sizes, and capacities, are available for varying needs of filing systems.

Importance

Filing equipments have crucial importance in a modern filing system. In fact, they may be regarded as the basic ingredient of filing. They are necessary for record keeping purposes in the office. Without filing equipments, the filing system cannot be expected to function properly. The importance of filing equipments in records management lies in the fact that they facilitate filing, sorting, storing and preservation of office records. They ensure safety and security of the records. The uses of

equipments uses highlighted above clearly indicate their importance in the day-to-day working of the filing section.

Choice of Equipments

Filing equipments should be selected after taking into consideration the following points :

i) Volume of papers/records

ii) Frequency of reference required

iii) Speed of availing information desired

iv) Quality and appearance of equipments

v) Availability of floor space.

vi) Visual signalling — whether desired or not

vii) Budget provision made

Check Your Progress D

1) Fill in the blanks :

    i) In flat files, papers are inserted in _____order one above another.

    ii) Departmental filing is also known as _____ filing.

    iii) Papers are not fastened together in _____ filing.

    iv) Training of juniors in filing work is not possible in _____ filing.

    v) Security of confidential records cannot be assured in _____ filing.

2) Which of the following statements are true and which are false?

    i) Papers can be taken out of arch-lever files without disturbing the arrangement of other papers.

    ii) Only numerical classification of files is possible in vertical filing.

    iii) Cabinets with drawers are most useful in vertical filing.

    iv) Centralised filing ensures more efficient office service than departmental filing.

    v) Decentralised filing is relatively more economical than centralised filing.

5.14 LET US SUM UP

Paper work in a modern office involves handling of written records and documents. It includes preparing, collecting, processing, storing and disposition of records as well as making records available for use.

Records refer to written material and documents prepared for future use. Records may take the form of letters, circulars, invoice, vouchers, charts, reports, returns, statements, registers, books of accounts, tapes and micro-films. It provides ready information and references to management for policy-framing and decision-making. It maintains a historical record of the organisation, facilitates comparison and detection of errors, and compliance with legal formalities. A records manual contains general guidelines and specific instructions regards as the records-keeping programme.

Filing is the core of record-keeping and the most important aspect of records management. It is the process of arranging and storing records so that they can be easily and promptly located whenever required. It preserves office records safely as long as necessary. It aids managers in planning, directing and controlling the activities of an organisation. The objectives of filing include ensuring systematic arrangement, safe storage, ready availability, economy and efficiency of operations. Provision of safety, simplicity, suitability, accessibility, flexibility and economy are some of the essential requisites of a good filing system. Before filing papers, they need to be classified. There are different methods of classification, viz. Alphabetical, Numerical, Geographical, Subject-wise classification.

Filing Routine of procedure consists of mainly two stages viz. (i) receiving and filing papers, and (ii) issuing and refiling the papers. Necessary steps and formalities are laid down in the filing manual which must be meticulously observed. Records retention and disposal should be carried out in accordance to the storage capacity. Micro-filming is an advanced technique of reduction and retention of massive data for a long time.

Modern methods of filing may be broadly divided into (i) horizontal filing, and (ii) vertical filing. In horizontal filing, papers and files are kept in a flat position i.e. one upon another. Flat files and lever-arch files are the two important filing equipments used in horizontal filing. In vertical filing, papers and files are kept in a vertical or upright or standing position. Folders, drawers and cabinets are the equipments widely used in vertical filing.

There are two methods of organising the filing functions in an organisation. These are (i) Centralised filing, and (ii) decentralised filing. In the centralised system, all records relating to different departments in the organisation are filed at one central place. On the contrary, under decentralised filing, every individual department in the organisation undertakes its own filing work independently.

Different types of filing equipments are used in offices e.g. File covers, Cupboards in horizontal filing, and folders and filing cabinets in vertical filing. Filing equipments help preservation of records, optimum utilization of space, sorting and other facilities. Simplicity, adequacy, economy, adaptability, durability, etc. are the essential requisites of good filing equipments. While selecting equipments the volume of records, frequency of reference, desired speed of availability, quality of office lay-out and financial provision, should be taken into consideration.

5.15 KEY WORDS

Centralisation of Filing : Filing system in which the records relating to different sections or departments in the organisation are filed in one central filing department.

Classification : The process of sorting out and grouping office, records, letters, documents etc. alphabetically, numerically, geographically or otherwise, before they are filed.

Cross-Referencing : References noted in files other than the file containing the original record.

Dead File : A file, the retention period of which is over and which is of no use any longer.

Decentralisation of Filing : Filing system in which filing work is carried out in individual sections or departments independently.

Filing : The process of arranging and storing records so that they can be located easily and quickly, whenever required.

Filing Routine : The steps in filing work consisting of collecting, receiving and placing the papers in the files and issuing them for uses or references and refiling them.

Horizontal Filing : Method of filing in which papers and files are kept in the flat position i.e. one upon another.

Micro-Filing : An advanced technique of reducing or condensing mass records film rolls for long-term retention and preservation.

Office Records : Written documents prepared for possible uses in future.

Out-Guide : An out-slip indicating the withdrawal of any paper or file and its whereabouts.

Records Management : An integral part of office management, which is concerned with the creation, distribution, retention, retrieval and disposal of records

Records Manual : A hand book of relating to records keeping programme, containing procedural guidelines and instructions.

Vertical Filing : Method of filing in which papers and files are kept in upright or standing position.

5.16 ANSWERS TO CHECK YOUR PROGRESS

A) 1) i) False   ii) False
   2) i) evidence   ii) personnel

B) 2) i) False   ii) True   iii) False   iv) False
      v) True   vi) True   vii) True

C) 3) i) True   ii) False   iii) False   iv) True   v) True

D) 1) i) Chronological   ii) Decentralised   iii) Vertical
      iv) Departmental   v) Centralised

   2) i) True   ii) False   iii) True   iv) True   v) False

5.17 TERMINAL QUESTIONS

1) What are the objectives of records management? Discuss the functions of records management.

2) What is meant by filing? What are the functions of filing?

3) Briefly describe the main features of horizontal filing. What are its advantages and limitations?

4) What do you understand by vertical filing? Outline the merits and demerits of vertical filing.

5) Explain the concept of centralisation of filing and decentralisation of filing.

6) Enumerate the nature of records for which alphabetical, Numerical, Geographical, and Subject-wise classification would be most suitable.

7) Discuss the nature and importance of records management.

8) Define 'filing' and briefly describe its advantages in office management.

9) Discuss briefly the methods of classification of office papers and records.

10) Explain the essentials of a good filing system.

11) Describe the steps involved in filing routine or procedure.

12) What are the characteristics of centralised filing? What are the advantages and disadvantages of centralised filing?

13) What is meant by decentralisation of filing? Discuss its advantages and disadvantages.

14) Discuss the usefulness and importance of office filing equipments.

> Note : These questions and exercises will help you to understand the unit better. Try to write answers for them. But do not send your answers to the University. These are for your practice only.

UNIT 6 FILING EQUIPMENT

Structure

6.0   OBJECTIVES

After reading this unit, you should be able to
- define indexing

- state the objectives of indexing

- distinguish between different types of index

- describe the uses of open shelves, loose-leaf binders, guides and signals

- identify the equipments required for vertical card index.

6.1   INTRODUCTION

In Unit 5 you have learnt methods of filing and various equipments used for storage and protection of records. Filing and indexing are two essential functions of records management which involves collection, classification and preservation of files in such a way that papers required by executive can be readily made available to them. In this unit you will learn the importance and types of indexing and retention and disposal of files. You will also be acquainted with the uses of open shelf, loose leaf binders and guides and signals.

6.2   INDEXING

An index literally means an indicator or guide. In the context of filing, an index may be defined as a guide to locate the required file. Thus, indexing may be described as a method of providing indicators for locating data or records. As an aid to filing, indexing may be defined as the process of determining the name, subject or some other caption under which specific documents are to be filed.

An index serves the purpose of a guide for locating files and papers. It is an important aid to filing. It provides a ready reference list of records to locate particular documents from among a number of files. It may also serve as a condensed record of customers, suppliers, etc. with their addresses, telephone numbers, and file references.

The term 'indexing' should not be confused with the term 'classification'. Classification refers to grouping and arranging papers in different files, whereas indexing is required for making reference to the paper already filed. If the files are arranged alphabetically, chronologically, or geographically in the alphabetical order, there is no need of a separate index. Such files will be self-indexed. For instance, a Telephone Directory is self-indexed as the names of subscribers are arranged alphabetically. But in all other cases a separate index needs to be prepared and maintained. When a separate index is employed two steps are necessary to find the desired record. First the index must be consulted, and secondly, the file must be located.

6.2.1 Importance of Indexing

An index is an essential aid to the filing system. It guides the office staff in locating documents or information necessary for managerial use. It ensures ready availability of records, and saves time and effort. An index is to the filing system what the key is to a lock. It enhances the utility and efficiency of the filing system.

In a modern office, an index is also required for different kinds of registers and ledgers. Besides, indexing can be used for listing useful particular in a condensed form regarding any subject. A business firm can prepare and maintain an index of its regular customers containing their names, addresses, telephone numbers, ledger folios, credit limits, etc. for ready reference. Similarly, clubs, hospitals, doctors, lawyers, architects can also maintain index of their respective members, patients, clients, etc.

6.2.2 Advantages and Objectives of Indexing

Advantages

Indexing offers the following benefits making for greater efficiency of records management.

i) **Easy location** : Papers and documents required can be located very easily. Thus, referencing is not a tedious and time consuming process.

ii) **Easy cross-referencing** : Indexing also ensures easy and quick cross-referencing and thereby saves time and effort.

iii) **Lower cost** : There is lower cost of the records management due to improved efficiency.

Objectives

The more important objectives of indexing in the office management are as follows :

i)   To facilitate easy and quick location of required papers and files.
ii) To enable cross-checking and cross-referencing.
iii) To aid and assist the filing system.
iv) To save clerical efforts.
v)   To save executive time.
vi) To increase general efficiency of office work.

6.2.3 Essentials of Good Indexing

In order to achieve its objectives a good system of indexing should possess the following essential qualities :

1) **Simplicity** : It should be simple to understand and operate.

2) **Economy** : It should be economical in terms of money, space and efforts.

3) **Efficiency** : It should ensure speed and accuracy of locating files.

4) **Flexibility :** It should allow necessary adjustments or modifications.

5) **Cross-Referencing :** It should permit cross-referencing of documents relevant to two or more files.

6) **Signaling :** It should provide for suitable plastic or metalic signals.

Check Your Progress A

1) What is an index?

....

....

....

2) What is meant by indexing as an aid to filing?

....

....

....

3) Which of the following statements are true and which are false?
   i) Index can serve as a condensed record of customers and suppliers.
   ii) A separate index is required for all types of arrangement of files — alphabetical, numerical as well as geographical.
   iii) Ledgers and registers do not require any index.
   iv) Indexing helps cross-referencing.
   v) An index once prepared cannot be expanded.

6.3 TYPES OF INDEX

Every system of indexing has its own advantages and limitations. Therefore, the selection of a suitable system of indexing becomes very difficult. Some methods are cheap, simple but rigid, whereas some others are costly, complicated but sophisticated. Under such conditions, a suitable index should be selected taking into consideration :

i) The requirements of the filing system.
ii) The objectives of keeping an index.
iii) The kind and amount of information required.
iv) The frequency of withdrawals of insertions.
v) The time and space requirement
vi) Cost of labour, stationery and equipments.
vii) The need for the use of signals.

Index of files may be of different types, which may be useful to different filing systems. These are shown in Figure 6.1.

Figure 6.1 : Types of Index

TYPES OF INDEX

Page Index	Card Index	Visible Index
1) Bound-book index		1) Visible Card Index
2) Vowel Index		2) Strip index
3) Loose-leaf-Book Index		3) Wheel index.
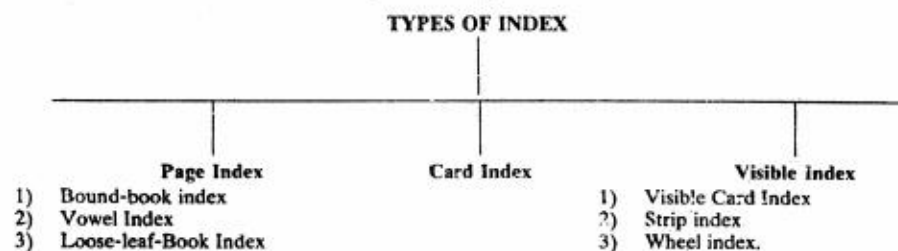
6.3.1 Page Index

Bound Book Index
This type of index is in the form of a bound book or register divided into alphabetical sections in which the names of or documents entered. Each section has the leaves cut out at the right hand side so that the initial letters of all the sections are visible at a

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glance. All entries relating to a particular letter of the alphabet are arranged in the same section or page reserved for that letter. Look at Figure 6.2 where bound book index has been shown.
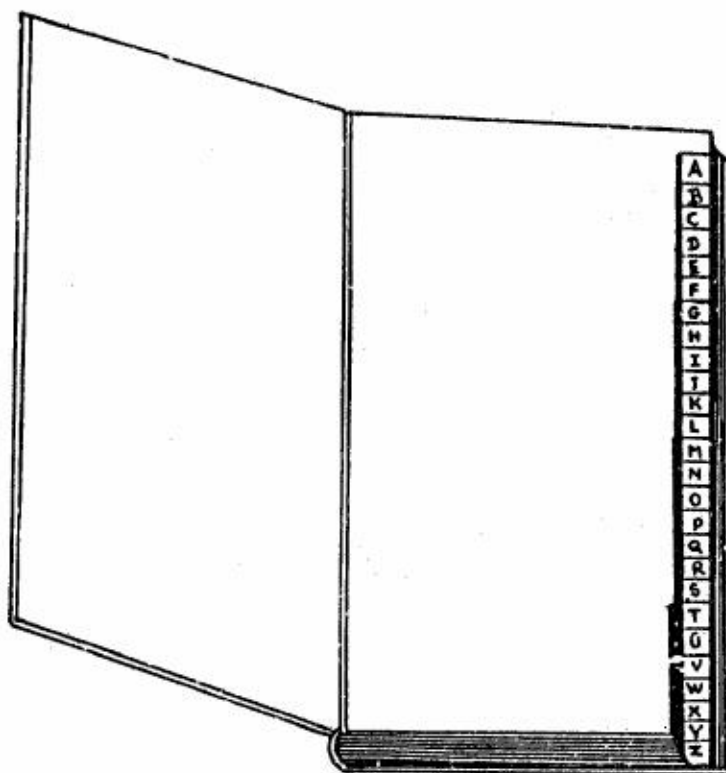
Fig. 6.2 : Bound book index

Merits of Bound Book Index

Bound book index has the following advantages :
i)   It is very simple to understand and easy to operate.
ii) It is not costly
iii) It is suitable for maintaining a permanent index.
iv) Pages cannot be lost, dislocated or disrupted because they are bound.
v)   No separate equipment is necessary.

Demerits

The following are some of the disadvantages of book index :
i)   If too many additions have to be made there may be no space at the proper place for new entries.
ii) Alterations in the index are difficult to make.
iii) Names deleted or struck off give a very shabby appearance.
iv) No information other than reference to the location of a file or document can be inserted in this index.

Book index is most commonly used by small organisations due to its inflexibility as regard to additional entries and alterations.

Vowel Index

This is also a type of book index with the additional feature that the pages of the bound index reserved for each alphabet are divided into six sub-sections for the six vowels (a, e, i, o, u, y) respectives. The names of customers or suppliers are recorded on the page reserved for the initial letter but in the sub-section meant for the first vowel occuring in the name after the initial letter. For example, ARVIND will be recorded on the page reserved for A in the sub-section earmarked for the vowel 'i' because 'i' is the first vowel after the initial letter in the name. Vowel indexing may be adopted for bound or loose-leaf ledgers. But it has limited scope for expansion. Thus only small business firms find it useful.

Loose Leaf Index

In this type of index, loose sheets are used while preparing the index. The loose sheets are fitted into metal hinges of screws which allow pages to be taken out or additional pages to be inserted as and when necessary. The binder may also be fitted with a lock. When a leaf or page is inserted or removed from it, the book is unscrewed and the relevant leaf put in or taken out.

Merits of Loose-leaf Index

Some of the disadvantages of this type of index are :
i)   There is scope of manipulation
ii)   Pages may be lost or damaged due to tearing of the punched holes.

Loose-leaf index may be conveniently used when ledgers, minute books, register of members etc. are maintained in loose leaf form. The loose index sheets may be inserted at the beginning of such books,   this has been shown in Figure 6.3.
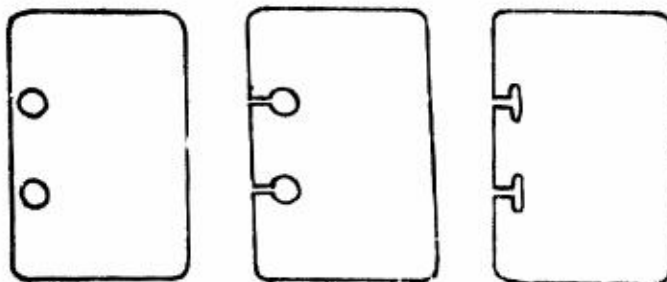
Fig. 6.3 : Loose leaf index

6.3.2 Card Index

A card index consists of a number of cards of standard size (12cms × 7cms or 4" × 2 ½"). A separate card is allotted to each item of the index. The reference heading is written at the top of the card and the remaining space is used to indicate the location of the record. In other words, these cards contain the names and other particulars of the documents or papers as well as the number of the file in which the particular records can be found.

The cards may be arranged in alphabetical or numerical order and placed in drawers or boxes of suitable dimensions. Each drawer may have a rod running from one end to the other for holding the cards in their places. The drawers are divided into separate sections by means of guide cards. To facilitate quick location of an individual card, tabbed guide cards may also be inserted at intervals.

Uses of Card Index

Card indexing can be put to several uses as follows :

i)   To contain the particulars of important documents and files.
ii)   To maintain accounts of stock items.
iii) To contain addresses and other particulars of suppliers and customers.
iv)   To maintain running accounts of customers.
v)   To keep a record of assest and investments.
vi)   To maintain records of instalment sales or sale on hire-purchase basis.
vii) To preserve specimen signature of clients or depositors in banks.
viii) To maintain service records of employees.

Merits of Card Index

A number of advantages may be derived from the use of card index.

i)   Cards can be arranged in any order alphabetical, numerical, geographical, etc.
ii)   It is quite economical to instal and operate.
iii) It is highly elastic or flexible because new cards can be added and old ones removed without disturbing the order.
iv)   It is simple to understand and easy to operate.

v) Cross-reference is facilitated inserting additional cards.

vi) Each card may be ruled according to the particulars or information requifed.

vii) The card may provide a complete list of the firms or persons dealt with, their addresses, telephone numbers, etc. as well as ready data.

viii) Cards can be classified on different bases e.g. in a library the cards per book can be maintained one as author index and other as book/subject index.

ix) Guide cards tabs may be used to highlight certain information e.g. overdue accounts. shortage of items, etc.

x) It can be used by several persons at the same time for obtaining necessary information quickly and easily.

Demerits

Cards index has also certain disadvantages as follows :

i) It is a blind system as more than one card cannot be seen at a glance.

ii) There is a danger of separate cards being lost.

iii) Supervision or checking may be difficult as there is a scope for free removal of cards.

iv) Cards may be torn or spoiled through constant handling and hence require replacements.

v) Card indexing is relatively costlier than book indexing.

vi) Cards may be substituted to commit or conceal frauds where card ledgers are in use.

Despite these drawbacks, card indexing is widely prevalent due to its flexibility and operational convenience. It is used in institutional libraries, hospitals, banks and factories.

6.3.3 Visible Indexing

Methods of indexing which permit particular of index to be read and examined without the necessity of touching the sheets or cards containing other items of index may be called visible indexing. Three different methods of visible indexing found useful are : Visible Card Index, Card-Wheel Index and Strip Index. The special features of these are outlined below :

Visible Card Index

In Visible Card Index, each item is recorded on a separate card, and every card is so fitted into a metal hinge that it overlaps the one before it so as to make the name and address on the card visible without the necessity of touching any other card. The cards may be laid flat in transparent covers in a metal frame or a shallow tray. The trays or frames may be fitted horizontally into cabinets or attached vertically to metal stands. Visible card index has been exhibited in Figure 6.4.
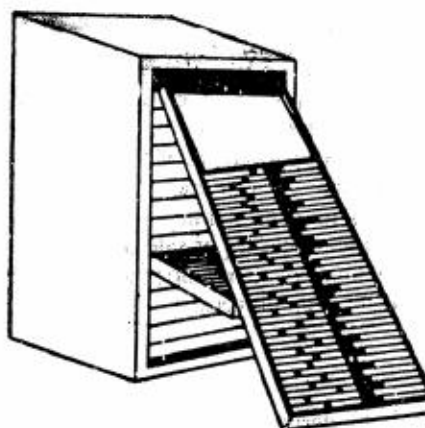
Fig. 6.4 : Visible Card Index

Wheel Index

This is another method of visible indexing, which is operated with the help of card-wheel. Cards are attached to metal rods surrounding a wheel set on a stand or tub. The rotating wheel can be held in any position by a brake so as to examine a

particular card. The card need not be removed to read the index and entries can be made while it is used in the same position. The metal rods have slits through which any card can be taken our or new cards inserted. A modern card wheel can hold upto 5000 cards. Look at Figures 6.5 where wheel index has been shown.

Fig. 6.5 : Wheel Index

Strin Index

This type of indexing device consists of metal frame into which strips of stiff paper can be fitted in any desired order. The items of index are written on the strips, each strip being devoted to one I am.. The frames can be held in a book form and fixed on the wall. Alternatively, they can be arranged on a rotary stand. To examine any part of the index, the rotary stand may be turned round. As a method of visible indexing, the strip index is easy to handle. But it provides very limited space of only a few lines for each item of index. He ice it can be ous use where entries consist of no other matter except the name addresses amd referemce number

Advantages of visible Indexing : There are several advantages which may be derived from visible indexing. These are:

1) As the main reference is instant visible, the methods visible indexing enables much quicker location and entry ote,s/

2) A compact index is provided in all these methods as the space required for a large number of cards or strips fitted into a tray wheel or metal frame is relatively much smaller.

3) Ready information can be provided with the help of visible indexing as an aid to management for controlling purchases, production, sales and credit matters.

4) Lists of the indexed items can be easily obtained by photo copying the tray or metal frames fitted with the visible index cards.

6.4 RETENTION AND DISPOSAL OF FILES

An office acts as an information centre in every organisation. So it is primarily concerned with the creation, utilisation, retention and disposal of the files. Naturally, files must be retained for future references. At the same time, dead or inactive files containing unwanted records should be disposed off.

6.4.1 Retention of Files

Sound records management calls for a logical retention policy. Every organisation should evolve its own retention policy, keeping in view the nature and types of information collected or generated, and the organisational goals.

Record Retention schedules generally specify the length of time that records and documents should be retained by an organisation. Such a schedule may specify for each class of document the following stage with respect to the life cycle of files/documents. Look at Figure 6.6 where span of life of documents has been shown.

Figure 6.6: Span of Life of Documents

SPAN OF LIFE OF DOCUMENTS/PAPERS

Active Life	Inactive Life	End or destruction stage
Keep the records ready in their original form	Retain the records in duplicate or transfer the records	Destroy the records when further retention is costly and unjustifiable
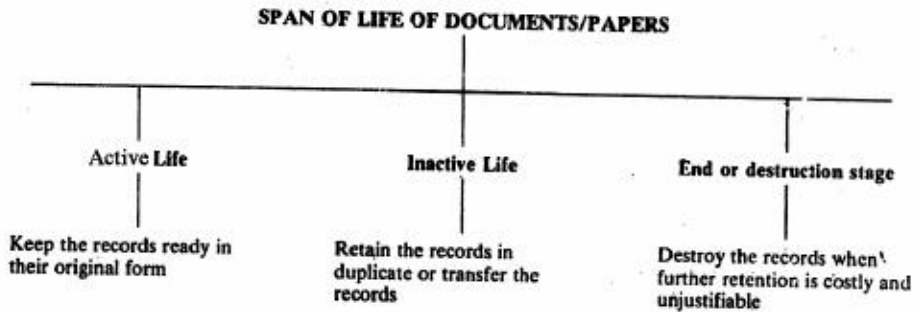
Every organisation should lay down its policy of records retention taking into consideration

i)   Nature and types of data or information
ii) Practical usefulness of the records filed.
iii) Frequency of references made.
iv) Legal or statutory requirements.
v)   Managerial and organisational requirements.
vi) Periodicity of review of office records in the light of the above factors.

Formulation of the records retention policy is usually entrusted to a team of senior officials. With a compete inventory of records, a suitable schedule of retention periods may be specified for each class or category of documents, papers and records. Special markings or notations should be made on the records already filed indicate the relative utility and the retention period of the records filed, e.g., P - for permanent records, T - for temporary records; C - for current records, etc.

Benefits of Records Retention : Systematic records retention enables an organisation to derive the following benefits

i)   considerable savings in cost and space.
ii) simplicity in retrieval of records.
iii) planned and systematic destruction of record.
iv) efficient utilisation of the filing equipments.

Procedure of Records Retention should consist of the following steps :

i)   Compilation of an inventory of office records.
ii) Classification of records according to their use purpose, and relative importance.
iii) Preparation of a schedule of retention periods.
iv) Periodical review of retention and disposal

6.4.2 Disposal of Files

A basic principle of Records Management is that when records become inactive, they should be destroyed or transferred to reserved storage. Every care should be taken to see that necessary records are not destroyed. But the unwanted or inactive records must be officially destroyed. Guidelines for the disposal or disposition of unnecessary files or records may be drawn up for systematic action.

Transfer of Records

Before disposing of or destroying office records, it may be desirable to records for reserve storage. Records may be transferred, on the expiry of their retention period, from the filing section to some other appropriate storage space. The records may be preserved there for a specified period and then destroyed after due authorisation. Transfer of records basically involves two stages, e.g.

1) Moving office records from active to inactive files and transfer of inactive files to a suitable place for storage.

2) Deciding on the dates for destruction of records, that is, final disposition.

Disposal of inactive and dead files is necessary for a variety of reasons, e.g.

i) Lack of storage space.
ii) Increasing cost of filing and storing records.
iii) Increasing volume of records due to expansion of business activities and legal requirements.
iv) Need for quick references prompt managerial decisions in complex situations.
v) Maintenance of proper office environment by removing unnecessary records.

vi) Optimum utilisation of the filing cabinets and equipments.

Storing of records cannot continue indefinitely as filing equipments become over-loaded in course of time. Many records outlive their utility or usefulness. Therefore periodic elimination of outdated material becomes necessary.

The life-cycle of all records consists of three stages namely :

i) **Active Utilisation :** Here quick access to the records is important and needed.

ii) **Storage Stage :** Here the records are stored for its possible uses or references.

iii) **Elimination Stage :** Here the records no longer of any use are destroyed.

Worthless records should never be stored and filed, records should be reviewed periodically to transfer or eliminate less useful or useless records. Only then can records maintenance be economical and facilities can be utilised to the fullest capacity. In other words, maintenances of records must give way to the disposition of records as judged by their usefulness. Records retention also implies disposition of records and should be concerned with the storage of those which must be retained and elimination of those which are or become worthless.

Considerations in Disposing Records

Before the final disposal of records and files, it is necessary that the considerations should be kept in view by managers taking the decision.

i) Records must have been classified 'live and dead' categories depending upon their practical usefulness.
ii) Availability of the storage space.
iii) Cost of filing and storing the records.
iv) Fixation of retention periods.
v) Guidelines as given in the filing manual.
vi) Periodic review of files or inspection of recirds by the sectional heads
vii) Procedure laid down for eliminating or destroyans useless records.

Check Your Progress B

1) Which of the following statements are True and which are False?
i) Loose-leaf index is more flexible than book index.
ii) No separate equipment is required for maintaining a book-index.
iii) Pages cannot be easily taken out or inserted since the loose-leaf index is fitted with hinges.
iv) Card indexing is less expensive than book-indexing.
v) A card index can be used by only one person at a time.

2) Fill in the blanks
i) Running account of customers can be maintained only in _____ index.
ii) Vowel index is an improvement over _____ index.
iii) _____ index is a variation of book index
iv) Strip index is a type of _____ indexing
v) _____ index is most suitable for presenting specimen signature of depositors in a bank

3) Give three reasons to justify the disposal of inactive or dead files.
i) ....
ii) ....
iii) ....

6.5 OPEN SHELF FILING

It is a method of filing in which open shelves are used for record keeping in folders or large envelopes. In open shelves folders may be arranged horizontally or vertically, and any method of classification may be adopted. Open shelves can be ceiling high (9 feet to 10 feet). Between two rows of shelves, an open space is left for the movement of staff. Ladders may be provided for the operators for handling files at higher levels.

Usually with open shelves, lateral filing method is followed in which file are suspended vertically. However, open shelves may also be used for horizontal filing. This method has become popular in large organisations in the West, particular in banking and insurance companies. Such organisations generally adopt numerical classification since deposit accounts and insurance policies are allotted numbers. But open-shelf filing requires more space and dust free area for the protection of documents and records. Open shelf filing has been exhibited in Figure 6.7.

Advantages

Open-shelf filing offers the same benefits as are provided by filing.

i)   There is saving in time for reference.
ii) There is unlimited scope for expansion.
iii) There is saving in cost of equipments.
iv) It is simple to understand and operate.
v)   It has large storage capacity.
vi) It involve very little maintenance.
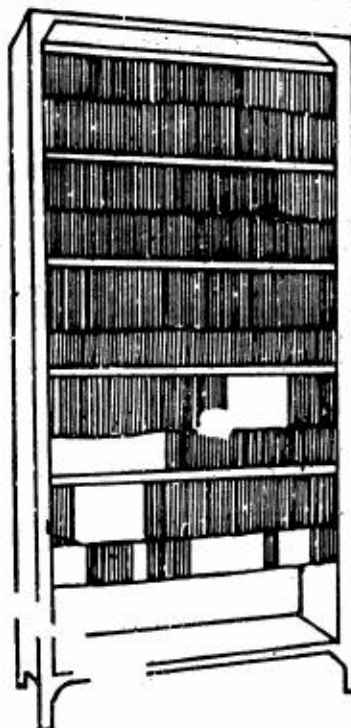
Fig. 6.7 : Open-shelf filing

Disadvantages

Open-shelf filing suffers from the following draw backs.

i) It requires larger space and hence proves more expensive.
ii) It is exposed to dirt and dust unless special precaution is taken to keep the area dust free.

6.6 LOOSE-LEAF BINDERS

In modern offices, loose-leaf binders have proved very useful in filing and indexing. Large organisation, particularly banks and insurance companies having thousands of customers' accounts find loose-leaf binders extremely convenient for maintaining records. Following are the special features of loose-leaf binder :

i)   Large number of pages or sheets can be put in a single binder.
ii) Pages or sheets can be inserted or taken out of the binder at any time and in any position easily and quickly.

There are different types of loose-leaf binder available for use. Let us discuss them in detail.

1) **Post Binders** : In this type, two or more metal post connect the covers in the binders. These post may be either (i) fixed or (ii) flexible. Where the posts are flexible, they can expand or contract by small sections or telescopically. The sheets are punched to fit into the posts.

2) **Ring Binders** : The covers of ring binders are fitted with a spine like bound books which limits their thickness. Two or more rings are connected to the inside of the spine. These rings can be opened to insert or take out pages or sheets which are punched to fit the rings.

3) **Spring Back-Binders** : Spring binders have a spine just like the ring binders. The spine is fitted with strong springs to hold the inside edges of the covers. Pages or sheets are not punched because they can be held together firmly by the springs.

4) **Prong Binders** : They are similar to ring binders. There are prongs to hold the papers, but these prongs do not close in pairs to form rings. They do not overlap because they are spaced out on each side.

5) **Thong Binders** : In this type, two or more round or flat flexible thong stretch from cover to cover, hence the name thong binders. These thongs hold the papers firmly. Pages or sheets are punched to fit these thongs. The covers can hold a number of papers depending on the capacity.

Advantages : There are many advantages of using loose-leaf binders :

1) **Easy Insertion** : Pages or sheets can be easily inserted into the binders. At the beginning, only one sheet may be inserted for each subject or account or head of income or expenses. Additional sheets can be added in correct hozition as and when necessary upto the maximum capacity of the binder.

2) **Easy Removal** : Dead matters can be taken of the binder easily and can be stored away separately in storage binders.

3) **Easy Location** : Guide sheets or tabled index can be put into the binders at different places. They help easy and prompt location of required sheets or pages.

4) **Scope of Self-indexing** : Classification of record sheets can be done in any manner and rearranged at any time in a new order. They can also be made self-indexing.

5) **Flexibility** : Papers can be easily divided and put into two separate binder, where sheets cannot be contained in a single binder. This facility gives the loose leaf binders complete flexibility. This is an unique feature because the sequence of the records are not disturbed, when the number of sheets in a binder exceeds its maximum capacity.

6) **Economy** : This system provides for high speed of referencing. There is also great facility of making new entries. Hence there is considerable saving of time and labour.

6.7 TICKLER

Indexing with the help of 'tickler' refers to a type of card-index which is provided with a device to stic up memory. A 'tickler' also refers to a file which consists of a series of follow-up slops or copies of letters etc. to be attended on a particular day.

The tickler file is locked up daily, and the first routine operation in the morning is the delivery to the proper persons of materials indicated by the file. Some offices do this a day before, so that the next day's work can be planned to include the tickler items. Some executives may wish to keep their own ticklers, but the central tickler file maintained as a routine is more reliable.

All kinds of memoranda wanted on a future date can be placed in the tickler file. The more general its use throughout the office, the more reliable it is. Private matters may be placed in sealed envelopes bearing the notation, "Bring up on _____ (date)" and signed by the person who is to receive it.

6.8 GUIDES AND SIGNALS

Guides and signals are generally used to ensure more rapid location of classified records or index cards or sheets. These are regarded as important aids to the system of filing and indexing in a modern office.

6.8.1 Guides and Out Guides

Guides cards or special sheets serve as indicators of the place of a set of records. The tabs of the guide cards are marked alphabetically or geographically or numerically. Out-maker or out guide cards ar also used to record the whereabouts of papers issued for use. If the whole file is sent for use by a particular officer, the out-guide card or sheet is placed in the particular section of the drawer. Folders are kept behind guides in accordance with the marks on the tabs. Thus if a guide card bears the number 20 and the next card bears the number 30, it means that each guide card serves as a guide to ten folders placed behind it.

Utility

i)   The principal utility of the guides or out-guides lies in facilitating easier and quicker location of the papers or records required from time to time.
ii)   They save time and efforts required for identifying and locating the papers needed.
iii) They aid and assist the indexing system.

6.8.2 Signals

A signal is also a guide to location of papers. It may be in the form of plastic tab or adhesive material which is attached to the exposed edge of records. A signal may be very small in size or large enough to write a brief description of the records to which it is attached. Some types of signals have space for writing some descriptive matters too.

The purpose of a signal may be served by its shape, colour or position along the edge of the folder, card or sheet. The location of a particular folder, record card, ledger folio, statement of account, etc. becomes easier and quicker by attaching signals. The signals may also be used to indicate some temporary significance of papers filed. e.g. certain signals can be attached to the customers' accounts so as to show the overdues recoverable or stoppage of the normal credit facility.

Objective of using signals

The main objective of using signals are as follows :

i)   to facilitate easy and quick reference to the records already filed by locating the same as and when required;
ii)   to draw immediate attention to certain facts recorded on the cards;
iii) to supplement the main classification of records;
iv)   to aid and assist visible card indexing.

Advantages

The above mentioned objects of signals are by themselves, the advantages of signalling, which may be outlined as follows :

i)   It provides easy and quick references
ii) It pinpoints certain facts recorded on the cards e.g. blue cards may indicate the staff pension accounts, red cards may show the insurance premiums due, etc.
iii) It helps in classifying office records depending upon their relative urgency and importance.
iv) It increases the usefulness of the visible car index.

Types of Signalling

There are two kinds of signalling :

i)   Temporary Signalling.
ii) Permanent Signalling.

i)   **Temporary Signalling** : Here, the signals, used temporarily, point out the need for immediate action or caution on the part of the office staff. For instance a red signal on a customer's card may indicate as to when the credit is or is to be stopped, or when his account falls over due, and when it is necessary to initiate the process of recovery.

ii) **Permanent Signalling** : Here, the signals attached permanently to folders or records, aid and assist the main classification of office records. For instance, the folders containing sales correspondence may be classified first alphabetically, and then certain signals may be attached to the folders showing the sales area (in terms of districts and towns) in which the customers are located.

In short, the extensive application and use of the signals is justified mainly because they facilitate easier and quicker identification of a particular fact or information as and when required.

Check Your Progress C

1) Fill in the blanks :
    i)   Loose-leaf binder can be used for _____
    ii)   Inactive files can either _____ separate or destroyed.
    iii) Open-shelf filing has _____ scope for expansion.
    iv)   In spring-back binder the _____ is fitted with springs to hold the inside edges of the _____
    v)   Copies of letter or files to be attended on a particular day may be kept in the _____ file as a reminder.
    vi)   Sheets are _____ before putting them in the loose-leaf binder fitted with posts.

2) What is parmanent signalling?

6.9 LET US SUM UP

In every modern office, indexing serves very useful purpose as an aid to filing and records management. An index serves as a guide to the location of files. An efficient system of indexing helps in easy and quick location of records needed and cross-referencing. By saving time and effort, it also reduces the operating cost of managing records. A good system of indexing should be simple, economical, efficient, flexible, and provide for cross-checking and cross-referencing.

There are different types of indexes of which those used in modern offices are : 1) Bound-Book Index, 2) Loose-Leaf Index, 3) Card Index, 4) Visible Card Index, 5) Strip Index, and 6) Wheel Index. Every method of indexing has its own advantages and limitations, depending on: i) Volume of information, ii) Filing requirements, iii) Frequency of references, iv) Cost element, v) Space required, and vi) Organisational goals.

Records retention is necessary in every office for a certain period of time. But all records cannot be preserved indefinitely. Then, retention schedules need to be prepared, specifying the limits of storage duration for each category of record. Periodic review is also desirable of the old and new office records, so that inactive or

dead records can be officially destroyed or eliminated. Records disposal consticutes an integral part of records retention. Records disposal economises costs and space, simplify retrieval of the records, and enable efficient utilisation of the filing equipments.

Open-shelf filing is a method of filing in which open shelves are used for records keeping folders or files can be arranged horizontally or vertically on ceiling-high shelves. It requires adequate space and dust free area. But it is simple, cheap, flexible and economical system of filing. It ensures large storage capacity and provides scope for expansion. Open shelves are widely used in all offices — small or big.

Loose leaf binders have proved very useful in filing and indexing. Types of binder available are : (i) Post binders, (ii) Ring binders, (iii) Prong binders, (iv) Thong binders, (v) Spring-back binders. Loose leaf binders provide the following advantages, viz. (i) easy addition and removal of sheets, (ii) quick location of records, (iii) facility of self-indexing, (iv) flexibility, and (v) economy in time and labour.

Guides and Signals are useful aids to filing and indexing. These are specially marked cards, clips or tabs attached to the edges of files, folders or papers. They may be of different sizes, shapes or colours indicating at a glance the reference code of records placed behind. Signalling may be temporary or permanent.

6.10 KEY WORDS

Bound-Book Index : A type of index maintained in the form of a bound book or register divided into alphabetical, geographical or numerical sections.

Card Index : A type of index consisting of cards containing necessary particulars.

Guides : Special cards of distinct size, shape and colour indicating the location of a particular class of folders, papers, etc.

Indexing : The process of providing indicators for a collection of records.

Loose-Leaf Index : A type of book index in which loose pages or sheets are held together by metal hinges.

Records Retention : The process of keeping or retaining official records for possible uses.

Retention Schedule : A schedule designed for records retention with definite time limits.

Signals : A metal clip, plastic tab, or adhesive material attached to the edges of records facilitating easy and quick location.

Tickler : A file consisting of the pending or follow it matters/papers/cases arranged in chronological order for the purposes of disposal by the officers.

Visible Card Index : An improved type of card index in which cards are visible.

6.11 ANSWERS TO CHECK YOUR PROGRESS

A) 3) i) True   ii) False   iii) False
      iv) True   v) False

B) 1) i) True   ii) True   iii) False   iv) False   v) False
    2) i) Card   ii) Bound-book   iii) Loose-leaf   iv) Visible   v) Card

C) 1) i) Filing, indexing   ii) Preserved/Retained   iii) Unlimited   iv) Spine, Covers   v) Tickler   vi) Puncned

6.12 TERMINAL QUESTIONS

1) Explain the meaning and objectives of Indexing. What are the essentials of good indexing?

2) What are the merits of Book Index? What are its demerits?

3) What do you understand by Loose-leaf Index?

4) In what respect is Card Index Superior to Loose-leaf index?

5) State the advantages of Open shelf-filing. What are its disadvantages?

6) Describe briefly the stages in the life span of office records. In what ways can inactive records be disposed of?

7) Name and explain the various types of Loose-leaf binders available for use.

8) "Indexing is an integral part of filing and records management." Discuss the importance of Indexing-in the light of the above statement.

9) Why Disposal of files or records is necessary? What are the important considerations to be kept in view before disposal of records?

10) Discuss the nature, purposes, merits and demerits of Card Index.

11) Write **Short notes** on :
   i) Book Index, ii) Loose-Leaf Index, iii) Tickler, iv) Signals, v) Vowel Index, vi) Self-indexing vii) Visible Indexing.

12) Distinguish between :
   i) Bound-book Index and Loose-Leaf Index.
   ii) Strip Index and Visible Card Index
   iii) Retention of files and Disposal of files.
   iv) Thong Binders and Ring Binders.
   v) Guides and Signals.

> Note : These questions and exercises will help you to understand the unit better. Try to write answers for them. But do not send your answers to the University. These are for your practice only.

UNIT 7 INWARD AND OUTWARD MAIL

Structure

7.0 OBJECTIVES

After going through this unit, you should be able to :

- explain the nature and importance of mail service in the office

- distinguish between centralised and decentralised organisation of mailing service

- describe the stages in handling inward and outward mail

- identify and explain the uses of equipments and machines for mail handling work.

7.1 INTRODUCTION

One of the basic functions of an office is to receive and transmit information relating to the operations of the organisation. This is particularly important in a business office. A business concern has to keep regular contact with its customers, creditors, investors and other organisations in the course of conducting its business operations. Mail service plays very important role in the business concern.

In this unit, you will learn the nature and importance of mail service, the organisational set-up required to handle the mail and the routine steps involved in handling inward and outward mail. You will also be acquainted with the equipments and machines used in a modern office for handling mail.

7.2 NATURE AND IMPORTANCE OF MAIL SERVICE

Correspondence received or sent through the post office or through messengers is called 'mail'. Mail may be classified into three distinct categories : Inward mail, Outward Mail and Interdepartmental mail. The value and effectiveness of mail to an organisation depend on the speed and efficiency with which it is handled or dealt with Mail service refers to the organisational set-up or arrangement in the office for dealing with all inward and outward mail. Every office, large or small, must set up the necessary mail service for prompt and efficient handling of mail. The importance

of mail service to an organisation should not be underestimated. It is the focal point of most business activities.

An effective and economical mail service enhances the efficiency of the organisation in various ways. By helping to improve interbranch and interdepartmental relations, it ensures better functioning of the organisation. Mail service is an indispensable and integral part of office operations. It supplements other office operations like correspondence, typing and duplicating and record keeping. These operations lose much of their effectiveness unless their efforts are backed by an efficient mail service. Prompt and correct handling of mail by the mailing department also helps in reducing the overall cost of office operations by eliminating unnecessary correspondence. Moreover, it helps in promoting the goodwill of the firm among customers and the public through prompt and correct handling of mail.

7.3 ORGANISING THE MAIL SERVICE

Where people work in a group, their combined efforts can be productive only when their individual efforts are organised and coordinated. Organisation helps to achieve the desired objective in the most efficient and economical manner. Like any other office service, mail service also requires the combined efforts of a number of staff working as a team. The purpose of organising the mail service is to ensure performance of mail handling work with maximum efficiency and at minimum cost.

Organising involves bringing together functions, personnel or staff and physical facilities (viz., accommodation, layout, working condition and equipment) and establishing their relationships within a well-planned system. Organising the mail service involves establishing definite routine for handling mail, assigning the task of performing these routines to staff possessing the necessary skills, providing the staff with necessary physical facilities and establishing well-defined relationships between them within the system. This helps in controlling and coordinating the work of individual staff to achieve the desired result. The type of organisation to be set up will depend on the size and nature of business. It also depends on the volume and frequency of mail handled each day, the system and routines established and the degree of mechanization of work. Mail service may be centralised or decentralised. Let us now discuss them in detail.

7.3.1 Centralisation of Mail Service

'Centralisation' of mail handling work means physical concentration of the work in one section or area of the general office. The central mailing section will be responsible for handling all inward and outward mail of the functional or operating departments of the organisation. The main object of centralisation of mail service is to achieve greater efficiency and economy through job sub-division and specialisation. The repeated performance of the same routine operation by the same worker leads to specialisation and greater efficiency. Routinization and standardization of the operations also facilitates mechanization resulting in greater efficiency and accuracy. Centralisation of mailing work also makes it feasible to appoint an expert supervisor to coordinate and control the work of individual workers.

Advantages : Centralised mail service has several advantages :

1) **Systematization of work** : It facilitates setting up of proper systems and routines in mail handling work. This leads to elimination of duplication of work and unnecessary operations, thereby effecting saving in time and expense.

2) **Greater efficiency and accuracy** : Each routine operation is performed by the staff having special aptitude and training for such work. This ensures speed, accuracy and efficiency in operation.

3) **Better supervision and coordination** : In centralised mail it is feasible to appoint a qualified supervisor to supervise and coordinate the work of individual workers. Proper allocation of work, even distribution of work-load and continuous supervision ensure better performance.

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4) **Prompt handling of inward mail** : Prompt and careful handling of inward mail and their proper distribution to the proper departments and individuals ensures prompt action on the mail. This contributes to greater efficiency of the entire organisation.

5) **Saving of clerical labour** : Duplication of work inherent in departmental mail service is eliminated leading to saving of clerical labour and office cost.

6) **Congestion of mail avoided** : Collection and despatch of outward mail from different departments may be so staggered that there will be no congestion or over-load of mail during rush hours.

7) **Better control over postage** : Wastage and misuse of postage stamps can be avoided. Better control over use of stamps and proper postage accounting ensures economy in postage expenses.

6) **Economical use of machines** : A large volume of mail handled by central mailing department justifies proper and fullest possible utilisation of mailing machines. This ensures economy in use of office machines.

Disadvantages : The following are certain disadvantages of centralisation:

1) **Costly** : It is a costly arrangement and proves uneconomic for small organisations with small volume of mail.

2) **Action delayed** : Some delay in collection and distribution of departmental mail is unavoidable in a centralised arrangement. Mail requiring quick action on its receipt cannot be dealt with quickly.

3) **Confidentiality of mail** : Central handling of mail results in loss of confidentiality of mail. Mail dealing with confidential matters are best handled departmentally.

4) **Physical location** : If the location of the functional departments is scattered widely, speedy and proper distribution or collection of mail from the departments becomes difficult and costly.

7.3.2 Decentralisation of Mail Service

Decentralised or Departmental mail service refers to arrangements whereby all incoming and outgoing mail pertaining to each functional department is handled within the department by the departmental staff. The actual arrangement will depend on the size of the business and the volume and nature of mail.

Advantages : The advantages of departmental service may be outlined as follows ·

1) **Less costly** : It is less costly than centralised mail service and hence can be adopted suitably by small and medium organisations with small volume of mail.

2) **Quicker disposal of mail** : Inward mail is received directly by the department concerned and can be disposed off more quickly than in a centralised arrangement. Special arrangement can be made for quick despatch of outward mail of urgent nature.

3) **Secrecy maintained** : Secrecy and confidentiality of correspondence can be better maintained in the departmental arrangement.

4) **Fosters departmental loyalty** : Departmental staff doing the mail handling work develop a sense of loyalty towards the department which improves the quality of their work. This enhances the reputation and image of the organisation.

Disadvantages : Certain disadvantages of departmental mail service should be noted:

1) **Loss of efficiency and accuracy** : Job subdivision and specialisation are not possible under this arrangement to the same extent as in a centralised set-up. Each departmental worker has to perform several routine operations single handed. This results in loss of efficiency and accuracy in mail handling work.

2) **Lack of proper supervision** : Each department cannot afford to appoint an expert supervisor to oversee mail handling work. The work cannot be properly supervised and coordinated.

3) **Duplication of work** : The same operations are performed in different departments by separate set of staff. This results in duplication of work and increased labour cost.

4) **Use of machines uneconomical** : The volume of departmental mail is not sufficiently large to justify economical use of mail handling machines.

Check Your Progress A

1) What is meant by centralisation of mail service?

....

....

....

....

2) Your organisation has five departments. Each department receives and sends out hundred letters a day on an average. Mention three principal advantages to be derived from decentralisation of mail service.

i) ....

ii) ....

iii) ....

3) Which of the following statements are **True** and which are **False**?

   i) Message received by telegram is not mail.
   ii) Mail service enhances the goodwill of the organisation.
   iii) Centralisation of mail service saves clerical labour.
   iv) Economical use of office machines is possible under departmental mail service.
   v) Departmental mail service leads to duplication of work.
   vi) Proper supervision is ensured in both centralised and departmental mail service.

7.4 STAGES IN HANDLING INWARD MAIL

An important phase of planning a mailing service is the establishment of definite routines for handling inward and outward mail. Inward mail is the logical starting point of the work of the mail service of an organisation. Planning and establishment of proper inward mail routine is very important. The efficiency in handling inward mail has a great impact on the efficiency and success of the business as a whole. The principles underlying the routine stages in handling inward mail are those of speed and accuracy. The routine stages for handling inward mail follow the following pattern in most large organisations.

1) **Receiving the mail** : The first stage in the routine is to receive or collect mail. Mail may be delivered by postmen, collected from the post office, or received through messenger. Ordinary mail is delivered by postmen once or twice a day or more often. Registered letters and money orders are delivered as and when they come. Telegrams and Speed Post letters and parcels are delivered by special messengers without delay. Some organisations hire post box or post bag at the nearest post office. In such a case, the mail is collected from the post office by an employee of the mailing department at regular intervals. This is done to avoid delay in delivery of mail by postmen and also to maintain secrecy of mail. Mail from local organisations are also hand-delivered by messengers to avoid postal delay, particularly when the message is urgent. An employee of the mailing department is assigned the duty of receiving mail delivered by messengers and sign receipts or the peon book in acknowledgement.

2) **Opening the mail** : The morning mail is frequently the heaviest. The work of opening the mail and sorting them for distribution to concerned departments should start earlier than normal opening time so that these may receive prompt attention of the dealing staff. Before opening the envelopes, a preliminary sorting

of the envelopes and covers is done to segregate urgent mail from ordinary ones. Envelopes may be opened by hand or with the help of machines.

3) **Scrutiny of the mail** : The contents of the envelopes have to be scrutinised carefully to ascertain their nature, number of enclosures and identity of the department concerned. Enclosures should be checked with the covering letter to verify their correctness. In case of money enclosures like cheques, drafts, postal orders etc., the amount indicated therein should be checked with the covering letter. If there is any discrepancy, it should be noted on the letter and initialled by the handling clerk. Remittances received by money order, registered post or insured post should be entered in a separate register kept for the purpose.

4) **Date-stamping of mail** : It is a common practice to stamp on each piece of inward mail with the date and time of receipt. This is important for avoiding any future dispute regarding date and time of receipt of the mail. A serial number is also printed on each piece of mail for the purpose of reference.

Date-stamping may be done by hand or mechanically. Rubber stamps provided with mechanism for changing the date are used for manual date-stamping. Specially made metal stamps, having devices for stamping date, time and serial number are also used. Mechanical devices like 'Date and Time Recorder' or 'Time Recording' machines may be used where the volume of mail is large. It saves time and leaves no room and error.

Specially designed rubber stamps are used where other particulars, besides date, time and serial number, are to be printed. One such stamp includes date and time of receipt as well as nature of action taken. Look at Figure 7.1 and Figure 7.2

Figure 7.1 : Specimen Rubber Stamp for Date-Stamping

| Marcos & Company Ltd. |
| No .... |
| Recd .... |
| Ackd .... |
| Replied .... |
| Filed .... |

Figure 7.2 : Specimen Rubber Stamp for Date-Stamping

Ref. No...
Recd ....
Filed...

Accounts Cashier Sales	1	
Legal Orders	2	
Mg. Director	3	

5) **Recording Inward Mail** : Some record of the mail received each day has to be kept as evidence of mail actually received and action taken on them. Different methods are used for this purpose. One such method is to record all mail received each day in a register known as **'Inward Mail Register'** or **'Letters Received Book'**. The mail is recorded chronologically and serially along with the name of the sender, nature, subject matter, department to which referred and action taken. However, this method is time-wasting and expensive and is becoming less common. A proforma of such a register is given below in Figure 7.3

Figure 7.3 : Specimen Ruling of Letter Received Book

LETTERS RECEIVED BOOK

Dat of Receipt		Ref. No.	Name & address of Sender	Nature of Communication & Enclosures	Particulars (Short Subject)	To whom referred to	Date replied to	Initial of Officer
1990 Mar.	5	78/c	A.B.Co. Ltd. Kanpur	Letter (Enclo.: Cheque for Rs. 500)	Full Payment against Invoice No. 251	Cashier		

Another method used is less cumbersome and time-wasting. A Mail Room List is prepared on each batch of mail delivered to a particular department on a particular day. Separate lists are prepared for each department and these are sent to the departments along with the mail. Carbon copies of the lists, duly acknowledged by the receiving department, are filled in the mail room for future reference. A proforma Mail Room List is given below in Figure 7.4.

Figure 7.4 : Specimen of Mail Room List

MAIL ROOM LIST

Letters for .... Department

Day .... Date .... Time...........

Name of Sender	Address	Remarks, if any

In some offices, only letters are recorded or listed and other types of mail like Orders, Challans, Statements etc., are sent to the dealing departments where they are recorded and dealt with. Telegrams and messages are treated as mail and recorded or sent to the dealing departments for action.

6) **Sorting and distribution of mail** : After date-stamping and recording, the inward mail has to be sorted out. To ensure correct sorting and distribution, the work should be assigned to an employee who is thoroughly acquainted with the organisation. To facilitate sorting separate trays, baskets or pigeon holes are used for each department or individual officer. Where the volume of the mail is large, hand or electrically operated Mail Sorter machines may be used. The sorted mail are sent to the respective departments by messengers.

Check Your Progress B

1) What do you mean by date-stamping of mail?

....

....

....

....

2) Enumerate the routine stages of handling inward mail.

    i) ....   ii) ....

   iii) .... iv) ....

    v) .... vi) ....

7.5 STAGES IN HANDLING OUTWARD MAIL

Handling outward mail is a much more complex affair than handling inward mail. It requires a thorough understanding of postal regulations and rates, timings of postal clearance, postal facilities available for despatch of mail etc. Equally important is the setting up of well-planned system and routine for efficient and economical handling of outward mail.

7.5.1 Stages in Making Outward Mail Ready for Despatch

Outward mail handled by the mailing department originate from different functional departments. Before the outgoing mail reach the mail room for handling, they have to pass through three preliminary stages which are performed departmentally. These are : (1) Production of the outgoing letters (2) Signature on the letters and (3) Referencing. Let us discuss them briefly

Production : It means drafting of outgoing letters or their dictation to stenographers. After drafting or dictation, the letters are transcribed and typed in proper form. At the same time, addresses of the recipients of the letters are also typed or printed on the respective envelopes.

Signature : After typing, the outgoing letters have to be signed by someone authorised to do so. Important letters are signed by heads of departments or responsible officers.

Referencing : It means putting a reference number on the letter. The reference number consists of letters and numbers which serve as a code or clue for identifying and locating the letter in future.

7.5.2 Stages in Despatch of Outward Mail

'Despatching' literally means 'sending off the mail', i.e., putting the mail in course of transmission to its destination by post or through messenger. Several routine steps have to be taken for collecting the outward mail from the departments, folding and inserting them in envelopes, sealing and stamping the envelopes, recording the outward mail and final despatch of the mail by post or messenger. Let us now discuss each step in detail.

1) **Collection of Outward Mail** : The first step is to collect the mail from different functional departments. A planned schedule of collecting outward mail should be established to avoid over-loading of mail at any point of time and consequent delay in handling. An internal messenger service may be maintained to collect the mail from the departments 3 or 4 times a day according to a fixed time schedule. The time schedule is so arranged as to correspond with the postal clearing periods.

2) **Folding and Inserting** : Usually outgoing letters are received from the departments along with the respective addressed envelopes. The letters and their enclosures have to be folded and inserted into the envelopes.

    Before folding, the enclosures of each letter are checked carefully with the letter. Each letter and its enclosures are then placed one inside the other and properly folded. Minimum number of folds are used to suit the size of the envelopes. Where a large number of letters have to be folded, hand or electrically operated 'Folding' machine can be used to save time and labour. Window envelopes may be used to avoid insertion in wrong envelope.

3) **Sealing and Stamping** : The next stage is to seal the envelopes and covers with gum or adhesive. Where sealing is done by hand, special methods are used to save time and labour. Envelopes of the same size are laid flat with their flaps overlapping each other. In such position, gum or adhesive can be applied to the end of a number of flaps at a time. Registered and Insured covers or articles sent by 'Book Post' have to be sealed as per Postal Rules. Where the volume of mail is large, hand or electrically operated 'sealing' machines or 'Envelope Sealers' may be used to save time and labour.

    Before stamping, the sealed envelopes are sorted out into two groups: those to be sent by post and those to be despatched by messengers. Mail to be sent by post are also sorted into different categories : ordinary mail, registered mail, speed post mail, book-post articles etc. This facilitates calculation of value of stamps to be used. The articles in each category are then weighed carefully to determine the value of stamps to be used as per postal regulation. 'Stamping', i.e., affixing of postage stamps on envelops and covers may be done by hand or with the help of machines.

4) **Recording in Post Book** : Maintenance of a written record of mail despatched is essential for two reasons : keeping a record of mail actually despatched and keeping an account of postage expenses. Outward mail sent out through messengers are entered in the Peon Book, which is signed by the addressee in acknowledgement of receipt. Mail sent by post are recorded in some offices in a register known as 'Outward Mail Register' or 'Despatch Register', which records the particulars of mail despatched each day in detail. However, this method is

being discarded in modern offices as being cumbersome and expensive. A
proforma of such a register is given below in Figure 7.5.

Figure 7.5 : Specimen Ruling of Outward Mail Register

Sl. No.	Date	Ref. No.	Name & Address of Addressee	Subject	Enclo.	Sender	Post	Remark

A better method of keeping record of outwrad mail is the 'Post Book' or 'Stamp
Book'. It is much more simple and inexpensive. The Post Book serves as a
record of outward mail as well as a means of controlling postage expenses. It
keeps a check on the stamps in hand and stamps actually used each day. When
maintained on the imprest system it reduces chances of misuse or pilferage of
stamps. A proforma of the Post Book is given below in Figure 7.6.

Fig 7.6 : Specimen Ruling of Post Book

Date		No.	Stamps in hand	Name	Address	Stamps used	Remarks
			Rs. P.			Rs. P.	
1989 Mar.	5	7	-50	A.B.C. Co.	Kanpur	0-50	

5) **Posting and Delivery** : This is the posting stage in the handling of outward mail.
Mail addressed to local addressees, particularly when they are urgent, are
delivered to the addressees by messenger. These are entered in a Peon Book and
the addressee has to sign the book before taking delivery of the mail. Ordinary
mail sent by post are delivered to the nearest Post Office and dropped in the
appropriate post box.

Distribution of despatch work throughout the day also facilitates the work of
both the mailing department and the post office concerned. Special category of
mail, like Registered, Express delivery and Speed Post Letters and parcels have
to be sent separately to the post office within the prescribed time for posting.

Check Your Progress C

1) Which of the following statements are True and which are False?

   i) Despatching means sending out letters by post
   ii) Franking machine may be used for affixing postage stamps.
   iii) Mails sent by post as well as by messenger pre recorded in the Post Book.
   iv) The Mailing Department is not concerned with the reference of outgoing
   letters.

2) Fill up the blanks in the following statements:

   i) .... envelopes are used to ensure that letters are not inserted in wrong
   envelopes.
   ii) Post Book serves as a .... of outward mail and as a check over ....
   expenses.
   iii) Outward mail sent out by .... need no postage stamps.
   iv) Letters sent by .... Post have to be delivered at the Post Office
   counter.

7.6 EQUIPMENT FOR MAIL HANDLING

Mail room equipments for handling mail consists of simple inexpensive items like sorting trays, pigeon hole, paper knife, weighing scale, staplers and gum. Where the volume of work is large, costly mailing machines like Letter-opener, Folding and Inserting machines, Envelope Sealers and Franking machine may be used. In any organisation, equipment and machines provided for mail handling depend on factors like volume of work, number of mail room staff, nature of mail and the system and routines established. Some important types of mailing machines used in modern offices are :

1) Letter-opening machine
2) Mail-sorter
3) Folding machine
4) Inserting machine
5) Mailing machine (Folding, Inserting and Sealing in one operation)
6) Envelope Sealer
7) Addressing Machine or Addressograph
8) Stamp-affixing machine
9) Franking machine

The function, working and advantages of some of these machines are discussed below.

7.6.1 Letter-opening Machine

Opening envelopes by hand is a laborious, time-wasting and expensive process. Letter-opening machine can turn out the work much faster and saves labour and expense. It can be profitably used in large offices with a large volume of inward mail.

Letter-opening machines may be hand-operated or electrically operated. Both are of the 'guillotine' type. The machine has a revolving knife-edge which cuts off a thin strip from the top end of the envelope. It can be adjusted to accommodate any size of envelope. The electrical variety can automatically feed, open and stack the envelopes at high speed. Envelopes can be opened at the rate of 75 to 500 per minute.

The **advantages** of using this machine are :

1) It saves time and labour leading to saving in labour cost.

2) Sorting and distribution of inward mail is speeded up. This helps the departmental staff to deal with the mail promptly.

3) It relieves monotony of the staff and enhances their morale and efficiency.

However, this type of machine should be used provided (a) the volume of work is large enough to justify its cost, (b) regular power supply is available, and (c) repairs can be arranged quickly when necessary.

7.6.2 Folding Machine

Folding machines are used to speed up the work and to save time, labour and expense. It may be hand-operated or electrically operated. The machine can fold papers in one, two or three parallel folds or even in cross folds, according to the size of the envelope. It can be adjusted to fold papers in different numbers and sizes of folds. Electrically operated machines can automatically feed the papers into the machine and fold them in the desired manner at the rate of 10,000 to 15,000 sheets per hour.

The **advantages** of using folding machine are :

1) It can fold papers at high speed resulting in great saving of time, labour and cost.

2) Papers are folded neatly and accurately, which ensures smooth insertion of the papers into the envelopes.

3) It relieves monotony of the staff, keeps them happy and contended and enhances their efficiency.

As in the case of letter-opening machine, the advantages of using a folding machine can be realised only if there is adequate volume of folding operation to justify its cost. Besides regular power supply and quick repairs service is essential for electrical operation.

7.6.3 Addressing Machine

Addressing machine or **Addressograph** machine is used to save time and labour. Besides printing names and addresses on envelopes etc., the machine can also be put to various other uses. Machines used with special 'Form feed', 'Listing' and other attachments are now-a-days used for all types of form-filling, listing and billing work. It can be used to prepare lists of customers, wage or pay-roll sheets, invoices and notices etc.

Addressing machines happen to be a developed version of duplicating machine. The only difference is that, it is designed to duplicate a number of separate names and addresses once or twice instead of duplicating the same many times. The machine may be hand-operated or electrically operated. In both types, the machine prints names and addresses of customers or other data from 'masters' fed into the machine. Names and addresses are cut on fibre stencils or embossed on metal plates which serve as 'masters'. The stencils or plates are arranged in a particular order, indexed and preserved for repeated use. When fitted with special devices, the machine can automatically select the masters in the desired order or sequence and feed them into the printer. The electrically operated machine can print addresses at the rate of 800 to 1000 per hour.

The **advantages** of addressing machines may be outlined as follows :

1) It effects great saving in time, labour and cost.

2) It eliminates chances of error in printing addresses and saves time and labour for checking and rechecking required under manual typing of addresses.

3) The work turned out is neat and flawless, which enhances the prestige and goodwill of the concern.

4) The work can be standardised which helps in measuring staff output.

The **disadvantages** of addressing machines are :

1) The cost of installing the machine is high which can not be afforded by small concerns.

2) If the addresses of customers change frequently, preparation of new stencils or plates may take time which may hold up work.

3) It requires trained staff to operate. In case of temporary absence of the operator, it may be difficult to obtain a substitute.

7.6.4 Franking Machine

Stamp-affixing machines are suitable where the volume of stamping is large. These machines can accommodate specially made rolls of stamps available from the post office. When a lever is pressed, a stamp gets automatically detached from the roll, moistened and affixed on the envelope. The major drawback of the machine is that, it can take up stamps of only one denomination at a time.

Where stamps of different denominations have to be affixed on a large number of envelopes, Postal Franking machines prove more useful and economical. Introduced after the International Postal Convention of 1922, franking machines are internationally recognised. Franking machines are licensed by Post Offices in almost all countries. The user has to buy the machine and get it registered at the Post Office on fulfilling the required formalities and payment of necessary licensing fees. The Post Office allots a registered number to the user. Payment has to be made in advance to the Post Office for an agreed total value of postage to be used. The Post Office sets the agreed value on the meter of the machine and seals i When the machine is used to frank reacts, the value of stamps used gets automatically recorded on a dial. When the total amount or value of postage set on the meter is reached, the

meter gets automatically locked and no further postage can be franked. The machine
has to be taken back to the Post Office for resetting of the meter for postage on
further payment. Franking machine prints an indicia or design on a postage stamp
and a date of cancellation mark. The indicia of the postage stamp indicates the value
of the postage franked and the country of origin. The date of cancellation mark
indicates the registration number of the user, the post office of registration and
cancellation date. Specimen of indicias printed by the Franking machine are shown
below in Figures 7.7 and 7.8.

Figure 7.7 : Specimen Indicia   Figure 7.8 : Specimen Indicia

Advantages : The following are the main advantages of using a Franking machine:

1) It speeds up the work leading to saving of time, labour and cost.

2) Necessity of keeping large stocks of postage stamps of different denominations is
eliminated. Loss due to pilferage and misuse of postage stamps is avoided.

3) Control of expenses on postage becomes easier and postage accounting becomes
simpler.

4) Franked mail can be more quickly dealt with at the Post Office.

5) Advertising slogans or special instructions can be printed on the envelopes
without extra cost or labour.

Disadvantages : The disadvantages of Franking machine are :

1) The value of postage that can be franked is limited in range, which sometimes
creates difficulty.

2) The need for frequent adjustment of levers to select different values of postage
slows down speed of franking and results in wastage of time.

3) Chances of over-stamping and under-stamping cannot be eliminated altogether.

4) Where no Post Book is used, there is scope of misuse of the machine for franking
private mail of the staff.

5) It does not totally eliminate the need for a Post Book.

Check Your Progress D

1) What is meant by Franking of an envelope?

....
....
....
....

2) Your central mailing department bandles 200 pieces of outward mail daily.
Name three machines that you consider essentials for such work.

i)........................... ii).........................
iii) ....

7.7 LET US SUM UP

Written communication or correspondence of any type received or sent out through the post office or messengers is known as 'Mail'. Mail may be classified as : (a) Inward mail, (b) Outward mail, and (c) Interdepartmental mail. Prompt and efficient handling of mail is vital for efficient and economical performance of business , operations and effective functioning of management. Mail service refers to the organisational set-up established for handling mail. Effective and economical mail service is essential for the efficient functioning of the organisation.

Mail service may be organised : (1) by centralising mail handling work in a central mailing department, or (2) by performing the work departmentally, i.e., decentralising the work. Both the arrangements have advantages and disadvantages. But for a large organisation with a large volume of daily mail, centralisation is desirable. It ensures greater efficiency and accuracy, better supervision and coordination, better control over postage, quicker handling of inward mail, saving of clerical labour and economical use of office machines. Departmental mail service lacks specialisation and efficiency in performance, lacks proper supervision, involves duplication of work and makes use of machines uneconomical.

For efficient handling of both inward and outward mail, a planned system and definite inward mail are : opening of the mail, scrutiny, date-stamping, recording, sorting and distribution. Before outward mail can be handled for despatch it passes through three preliminary stages : production of the mail, signature and referencing. Routine stages involved in despatching outward mail are : collection of the mail, folding and inserting, sealing and stamping, recording, and posting and delivery of the mail.

Use of proper equipments and machines ensure speed and accuracy in performance of mail handling work. Some simple equipments are essential for mailing work even in small organisations and in departmental arrangement. Costly equipments and mailing machines can be properly and economically utilised only in large organisations with large volume of mail and centralised mail service. Some important types of machines used in the mail room are : Letter-openers, Mail sorters, Folding machines, Inserting machines, Envelope Sealers, Addressing machines and Franking machines.

7.8 KEY WORDS

Centralisation : Physical concentration of mail handling work in a central mailing department.

Decentralisation : Performance of mail handling work within each department by the departmental staff.

Despatching : Putting the outward mail in course of transmission to its destination through the post office or messengers.

Franking : The act of printing indicias of postage stamp and date of cancellation mark on envelopes with the help of Franking machine.

Mail Service : Organisational set-up established for handling mail.

Post Book : A book used for maintaining record of outward mail and account of postage stamps used.

Referencing : Assigning a code number or symbol on each letter to facilitate future reference.

7.9 ANSWERS TO CHECK YOUR PROGRESS

A) 3   i) False   ii) True   iii) True   v) False   v) True   vi) False

B) 2   i)Receiving   ii)Opening   iii)Scrutiny   iv)Date-Stamping
        v) Recording   vi) Sorting & Distribution

C) 1   i) False   ii) True   iii) False   iv) True
    2   i) Window   ii) Record Postage   iii) Messenger   iv) Registered

D) 2   i) Folding machine   ii) Addressing machine   iii) Franking machine

7.10 TERMINAL QUESTIONS

1) Discuss the nature and importance of mail service.

2) What do you understand by 'centralised' mail service? What are its advantages and disadvantages?

3) Outline the routine stages for handling inward mail.

4) Draw up a routine stages for handling outward mail and name the equipments used in this connection.

5) What is a 'Franking' machine? Briefly explain its working and advantages.

6) Write explanatory notes on:
   a) Departmental Mail Service
   b) Inward Mail Register
   c) Stamp-affixing Machine
   d) Post Book

Note :These questions and exercises will help you to understand the unit better. Try to write answers for them. But do not send your answers to the University. These are for your practice only.

UNIT 8 INTERNAL COMMUNICATION

Structure

8.0 OBJECTIVES

After studying this unit, you should be able to :

- describe the importance of office communication

- explain the elements and process of communication

- describe various types of internal communication

- explain the forms of internal communication

- describe various means of internal communication

- outline the features of a good internal communication system.

8.1 INTRODUCTION

Communication is the process by which information, ideas or opinions are exchanged between individuals through a mutually understood language or symbol. It is the life blood of modern commercial and industrial world. The image, efficiency and success of a modern business depends on the standard of its communication service. Formulation of policy decisions by the management as well as day-to-day operating decisions by the managers depends upon timely availability of accurate and pertinent information. To be effective, communication must take place at the proper time speedily and accurately. In this unit you will learn the importance of communication system and its types and forms. You will also be acquainted with characteristics of a good internal communication system and the means by which it is effected.

8.2 IMPORTANCE OF OFFICE COMMUNICATION

Communication is a vital tool of management. Favourable dealings with outside business contacts and effective relationships within an organisation depend upon communication. One of the major functions of the office is to provide efficient and

effective communication service to the organisation. Effective communication helps in maintaining effective leadership, good human relations, high morale and motivation in the organisation. Followings are the importance of the office communication.

1) **Supply of information to managers** : The soundness of management decisions with regard to planning, guiding and controlling business operations is largely dependent upon timely availability of accurate and complete information. It is the function of office communication service to supply such information to the management.

2) **Communication of management decisions** : Policy decisions and directions of the top management have to be communicated to different levels of staff for implementation. An effective office communication service is essential for such communication.

3) **Effective relationships** : The day to day functioning of the organisation at all levels requires maintenance of effective relationships among different levels of staff and executives. This is possible only when there is smooth flow of communication between them.

4) **Proper coordination** : Achievement of planned objective of the business depends on proper coordination of the activities of different departments and staff of different levels. Office communication service makes it possible by maintaining the required communication link between them.

5) **Maintenance of outside contact** : Maintenance of favourable relationships with outside contacts is vital for the success of any business concern. An effective office communication service greatly helps in maintaining this contact and enhancing the image of the organisation.

8.3 ELEMENTS AND PROCESS OF COMMUNICATION

Communication cannot occur unless the information, idea or opinion to be communicated is composed and transmitted and finally understood by the receiver. The purpose behind every communication is to evoke some action. The communication process starts with the conception or clarification of the information or idea to be passed on by the sender and ends with the action taken by the receiver.

The communication process consists of the following sequence of steps :

i) **Ideation:** Conception of the idea or message to be passed on.

ii) **Composition:** Framing of the message in appropriate language or symbol and in proper form which can be readily understood. This is known as encoding.

iii) **Transmission:** The selection of appropriate channel, means and method for conveying the message to its destination.

iv) **Receiving:** The receiving of the message by the intended recipient.

v) **Understanding:** Interpreting the language or symbol of the message and understanding its intended meaning. This is known as decoding.

vi) **Action:** The use of the transmitted message for specific action or for storing it for future action.

The first three steps are the responsibility of the 'sender' of the communication. The last three steps are the responsibility of the 'receiver'. However, the communication process is not a one-way traffic. A reverse flow of communication (response) may start from the end of the receiver and reach the sender of the original message. This is called the 'feed-back' process.

The different elements of the process of communication are :

i) the sources and destination of the communication
ii) the contents of the communication

iii) the language or symbol used in communication
iv) the channels of communication
v) the means and method of transmission of communication

Communication has two ends—sending and receiving. The communication originates with the 'sender' of the message and the destination of the communication is the 'receiver'. The communication is useless unless it is directed to the person who may understand it and take action on it. The content of the communication has an important bearing on the understanding and action of the recipient. Unless the message is meaningful, accurate and complete, the receiver may not realise its significance and thus unable to take appropriate action on it. An important element of communication is the language or 'symbol' used in the message. Usually the symbols used must be intelligible to both the sender and receiver.

The selection of the proper channel of communication, that is the route or path to be followed is important. Communication flows along the intended or planned channels. The flow of communication may be unidirectional or multi-directional, vertical or horizontal, downward or upward.

Communication loses much of its effectiveness unless it is transmitted speedily and accurately. Much will depend on the form, means and method of transmission adopted — oral or written, manual or mechanical. The office communication may be classified as : **Internal** and **External**.

Internal communication refers to exchange of information between individuals and departments within the organisation. Communication between the head office and branch offices situated elsewhere are also termed as internal communication.

External communication refers to exchange of information between the organisation or office and its external contacts. The external contacts may be customers, suppliers, investors, creditors, other companies, Government or financial agencies, trade unions, trade associations, professional and service institutions etc.

Check Your Progress A

1) What is the difference between internal and external communication?

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2) List the sequence of steps involved in the communication process.

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3) Fill in the blanks with appropriate words.
   i) Communication is effective only when it is .... and ....
   ii) The .... of communication must be intelligible to both the sender and receiver.
   iii) Soundness of management decision depends on .... and .... information.
   iv) Communication has two ends .... and ....
   v) Communication is intended to evoke .... on the message.

8.4 TYPES OF INTERNAL COMMUNICATION

Internal communication, also known as 'Inter-communication', takes place between departments and individuals within the same organisation. It may be

(i) Intra-departmental, i.e. between the executive and staff of the same department; or (ii) Inter-departmental, i.e. between staff of one department and those of other departments. All office work, whether performed centrally or in a decentralised manner, are inter-related and inter-dependent. Effective coordination and efficient performance of the work are not possible unless there is continuous flow of communication between departments and between individual staff in each department. Internal communication system ensures a continuous and speedy flow of intra-departmental and inter-departmental communication.

Internal communication may be classified into different types according to : (i) organisational relationships, (ii) the direction of flow, (iii) form or medium of communication, and (iv) means and methods adopted for transmission. Let us now discuss some important types of internal communication.

8.4.1 Formal and Informal Communication

On the basis of relationships in the organisational structure, inter-communication may be **Formal** or **Informal**.

Formal Communication : Formal relationships are laid down in the organisational structure through the definition and description of the functions of various positions and the inter-relationships of the positions. Formal communication follows the channels of formal relationships in the organisation such as between superiors and subordinates. It can be planned to meet the specific needs of the structure and relationships of the organisation. Formal communication moves in a vertical flow, downward or upward, along the channels of authority and responsibility in the organisational structure. Communication flows downward from highest level of authority to lower levels, from superiors to subordinates. The upward flow of communication, such as feedback information, moves from the lowest level of subordinates to higher levels of superiors.

Informal Communication : In every organisation, behind the cover of formal relationships, many informal relationships develop among people with the passage of time. Managers and supervisors as well as other employees coming in daily contact with each other in course of their work, or otherwise develop informal relationships which cut across the lines of formal relationships. In many organisations, management tries to utilise these informal relationships to strengthen formal relationships. Informal communication, often called the **grapevine**, arises out of the informal relationships. Such communication takes place between persons or groups at the same or different levels of hierarchy. Information passes informally between such persons or groups as they discuss their respective problems when they meet in course of their work or during informal meetings.

Apart from serving social needs of the persons involved, informal communication may be helpful also in achieving organisational goals. Managers or supervisors can utilise the grapevine as a positive aid in solving particular problems. However, grapevine cannot always be relied upon to pass genuine information, as such information may be influenced by gossip, rumour or negative view points of interested persons. Although not officially recognised by management, it still plays a vital role in many organisations.

8.4.2 Vertical and Horizontal Communication

Internal communication may be unidirectional or multi-directional. Communication may flow in different directions according to the structure and needs of the organisation. You have already learnt that the formal communication usually follows the channels of formal relationships of authority and responsibility. On the basis of its direction of flow, formal communication may be classified as Vertical and Horizontal. Again vertical communication may be of two types : Downward and Upward communication. Let us discuss them in detail.

Downward Communication : The lines of authority in any organisation flow down vertically from higher to lower levels. Following the lines of authority, flow of communication moves downward from superiors to subordinates at different levels of organisation. Downward communication helps to pass on the decisions and directions of higher authority of superiors to subordinates at lower levels for implemention.

Upward Communication : Responsibility or accountability in an organisation flows vertically upward from subordinates to superiors. As subordinates are accountable for their actions, they have to report to their immediate superiors on their performance through reports, suggestions, complaints etc. Communication of such information moves upward from the lowest level of subordinates to superiors at higher levels. This is also known as 'feedback' information. Feedback information is vital for success of the control function of management.

Horizontal Communication : This type of communication flows laterally along horizontal lines or channels, between managers and executives on the same level of the organisation. It helps the managers to coordinate their activities and handle matters without referring all matters to the superiors. This speeds up action and at the same time relieves the superiors of unnecessary workload.

8.5 FORMS OF INTERNAL COMMUNICATION

The two principal forms of internal communication are : **Oral** and **Written** communication. Both these forms have advantages and drawbacks, but both are used in every organisation to suit particular needs of communication. Another form of internal communication is **nonverbal** communication, i.e. communication by gestures or signs. Sometimes 'silent' language is more eloquent than words and also more economical. However, it has limited range of usefulness and cannot serve the needs of complex situations faced in the modern business world. Let us now discuss them in detail.

8.5.1 Oral Communication

Oral or verbal communication is the simplest and most commonly used form of communication. It takes place between persons through the use of spoken words. Oral communication may occur through face-to-face conversation or through some mechanical device like telephone. Following are the advantages of oral communication.

1) Oral communication is direct and involves personalised interaction which is very effective in getting across messages forcefully.
2) It provides an opportunity for the receiver to respond immediately to the communication.
3) It ensures speedy action by staff and executives.
4) It helps to maintain the secrecy of the communication.

Following are the disadvantages of the oral communication.

1) Oral communication is not suitable for conveying messages requiring lengthy explanation.
2) It requires the simultaneous physical presence of both the parties to the communication, which is not always feasible.
3) It sometimes leads to idle or unnecessary talk resulting in wastage of time.
4) It does not provide a written record of the communication, except where special arrangement is made to record the deliberations.

8.5.2 Written Communication

Communication through written media is the most important form of internal communication. Internal communication through written media involves distribution, and delivery of papers and documents within a department and between different departments. The communication may take the form of letters, reports and memorandum, formal documents like orders invoices, etc. or instruction notes, notices and circulars.

In the normal course of office work, executives and staff of each department have to deal with matters which require frequent exchange of information among themselves as part of the procedure. Similarly, exchange of written messages and documents take place between different departments regarding inter-connected matters of common concern. All these result in a large volume of departmental communication.

Written communication may be distributed or delivered internally through some human agency or with the help of mechanical devices.

The two district methods used are :

a) Actual delivery of the papers (i) through messenger service, or (ii) with the help of some mechanical device.
b) Transmission of the message with the help of some mechanical device without actual delivery of papers.

Advantages: The advantages of written communication are as follows :

1) Written communication conveys the message in more exact terms than oral communication.
2) It allows forethought in the composition of message. This ensures precision and accuracy of the message.
3) The length and form of the message can be easily adapted to the subject matter and requirements of the situation.
4) It provides a written record of the communication which can be preserved as evidence and for future reference.

Disadvantages : Following are the disadvantages of written communication.

1) Written communication takes time to produce and deliver, thereby delaying action.
2) It does not allow the sender an opportunity to get an immediate response to the communication.
3) Secrecy of the message cannot be maintained easily.
4) Being formal, it lacks the personal approach in communication.

8.5.3 Choice of Form

The choice of form of internal communication to be used depends on various factors. Management has to decide which form and method of communication — oral or written, manual or mechanical will be proper for meeting particular types of organisational needs. Management must assess and determine which of the message should be transmitted through written media and which must be transmitted orally, where to take the help of mechanical devices and which form will be more economic in the long run.

In selecting the form of communication to be used for a particular purpose, the following factors should be considered :

1) **Speed :** Whether speed of delivery is the most important consideration. If so, whether the additional cost is warranted by the need for greater speed.

2) **Cost :** Whether cost is more important than speed of delivery of the communication.

4) **Record :** Whether it is important to maintain written record of the communication as evidence and for future reference.

5) **Accuracy :** Whether it is important to avoid possibility of error and misunderstanding in communication.

6) **Equipment :** Whether use of costly equipment is necessary and, if so whether it will be economical in the long run.

Check Your Progress B

1) What is inter-communication?

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2) Which of the following statements are True and which are False?
   i) Upward communication moves from supervisors to subordinates
   ii) Feedback communication of follows the channels of responsibility.
   iii) External communication follows the lines of authority.
   iv) Horizontal communication takes plac3e between managers at the same level of hierarchy.
   v) Oral communication ensures speedy action in the office.

8.6   MEANS OF COMMUNICATION

A while variety of means and devices are available for oral and written communication. This has become possible because of the remarkable advance in recent years in the fields of communication technology and equipment. The selection of means to be adopted and equipments to be used for internal communication depends on various factors. These include frequency of the communication, urgency of the situation, speed and accuracy to be ensured, need for secrecy and cost involved. However, the aim should always be to adopt the means which will ensure transmission of messages quickly, accurately and economicaly. Let us now discuss different means of communication.

8.6.1 Means of Oral Communication

Oral communication on takes place between the persons through the use of spoken words. Following are the important means of oral communication.

Fact -to-face Communication : Face-to-face communication is the easiest and most natural means of oral communication. In the normal course of daily work, oral communication takes place frequently between executives and staff in the course of giving and taking of instructions, consultations, etc. In addition, periodical meetings of managers and executives are also held to discuss organisational plans and problems.

Direct oral communication is very effective in conveying the urgency or importance of a message more forcefully than written communication. Ideas can be expressed by words as well as gestures and expressions, which is not possible in written communication. Moreover, it enables the recipient to respond instantly and to express his viewpoint also. The main difficulty is that it needs physical presence and movement of staff to take part in the communication which leads to disruption of work and wastage of time. It does not provide any record of the communication. Moreover, it is not suitable where the message has to be conveyed to different pwrsons at the same time. Telephone is one of themost important means of oral communication.

Telephones: The telephones is thhe most widely used mechanical device for oral communication both internal and external. Many modern improvementw in telephone service and instrument hve made this the most useful and effective means of oral communication. The telephone service in most countries is run by government or semi-government agencies. In our country it is a nationalised service under the control of the Telecommunications Department. Let us now discuss different types of telephone facilities available for internal communication.

Direct Exchange Lines : All telephone subscribers are connected with the nearest Central or Zontal Telephone Exchange by direct lines. Each central exchange has a code number and each subscriber is also allotted a number. A subscriber can get direct connection with any other subscriber through the central exchange by dialling the required number. A large organisation can subscribe to several direct exchange lines.

Internal External Extension Lines : In a large organisation it is not possible to provide direct exchange lines for all the departments or executives, nor is it economical. In such a case, one or more diret lines can be connected with the departments and executives by means of Internal Extension lines. The direct line instruments as well as the extension line instruments can be used or both internal

and external communication. External Extension lines, connecting the head office with branch offices up to a limited distance, are also provided by the Telecommunication department on payment of additional charge.

Private Branch Exchange (PBX) : Where the number of internal external lines is large, a private Branch Exchange or PBX system is installed to facilitate operation and control. Permission to instal such a system has to be obtained from the Telephone authorities on payment of a special charge. Under this system, the direct exchange lines and all the internal/extension lines are connected to a private exchange switchboard. Any department or executive on an extension line can get connected with a direct line or any other internal extension line through the PBX switchboard without going through the central exchange. The PBX switchboard is operated manually by an operator employed by the office.

Private Automatic Branch Exchange (PABX) : This is an improvement over the PBX system and is fast replacing the manually operated PBX in large organisations. A true PABX system is fully automatic and is used only for intercommunication purposes. However, in most offices the PABX system combines automatic and manual operation and is used both for internal and external communication.

Under this system, the direct exchange lines and all internal extension lines are connected with the PABX switchboard. All interoffice calls and outgoing external calls are operated automatically through the PABX switchboard without the help of any operator. Only incoming external calls are handled by a manual operator. The user of any extension line can get any other internal extension line by dialling the particular code number. To get an outside connection through the direct line, he has to dial a special code number which gives direct access to the central exchange.

Private Wires/Exchange : Private wires are telephone lines not connected with any central exchange. The wires connect the instruments of internal telephone users and is meant only for internal communication. Private Exchange (PX) system is ideal for large organisations with extensive internal communication.

Other special devices : Special types of telephone instruments and ancillary equipments have been developed and they are used extensively in many developed countries. Some such devices are : Cordless telephone, Key-master system, Computer programmed telephone system, Telephone Answering and Answer-recording machines, Ampliphone or Loud-speaker system, Automatic Dialling devices, etc.

Intercommunication Systems

Intercommunication system, also known as 'Intercom' system, is a completely private system not connected with any public telephone exchange. It can be installed privately by any organisation, big or small. All departments of an organisation and selected officials can be connected by Intercom system. It is used only for internal communication.

In this system, all instruments are interconnected by multicore cable. Each instrument is provided with mouthpiece receivers and microphones and push-buttons for calling any other instrument on the system. Any call can be made by pressing a push-button which is announced at the receiving station by lights and buzzers. 5 to 40 extension lines can be connected by Intercom system. Some systems provide conference facilities. By pressing a number of push-buttons at a time, simultaneous conection can be established with several executives for intercommunication as in a conference. A computerised version, known as 'Intellicom', can be expanded to connect up to 100 stations and can be programmed to perform different functions automatically, like holding and transferring of calls.

Executive System : It is an improvement of the Intercom system and is also known as House Telephone. It facilitates internal communication between executives and their subordinates. In this system, a number of extension lines radiate from a central instrument. An executive can have direct and simultaneous connection with several

extension lines and speak with other executives or with his subordinates as in a conference. The connection can be made by pressing the required buttons without going through a switchboard. Some executive systems are fitted with microphone and speaker device which allow the executive to speak or listen without having to lift a 'receiver'.

Paging Systems : In large organisations, it is often necessary to call or find an executive or a member of the staff quickly. Paging or Staff-location system is used for this purpose. The age-old system of paging through messenger boys or use of bells, buzzers and other signals to call a messenger or staff are still used by some organisations. These days it is inadequate and costly in terms of time and labour. Their place is being taken by Electric or Wireless Paging systems.

Electric Paging System : This is useful in large organisations for locating executives who move about the office in course of their work. The system operates through the telephone switchboard. Each important executive is allotted a particular number. When a particular executive is urgently wanted for some message, the operator of the switchboard makes the necessary signal on the telephone which sounds throughout the office. On hearing the signal, the executive picks up the nearest phone and contacts the operator for the message. In another system, loudspeakers are used to call the attention of the executive.

Wireless Paging System : In this system, each executive or important staff is allotted a portable transistor receiver which can be carried in the pocket. When a particular executive or staff is wanted, a central closed-circuit transmitting station sends a wireless signal on a particular frequency. Each receiver only picks up its own particular frequency and makes a bleeping sound. On hearing the bleep the person concerned picks up the nearest phone and contacts the telephone operator to enquire where and why he is wanted.

8.6.2 Means of Written Communication

Internal written communication may be transmitted through messengers or mechanical devices. Actual delivery of papers to departments or desks can be effected by organising a messenger service. Messages can be transmitted with or without actual delivery of papers with the help of mechanical devices like conveyors, chutes, lifts or pneumatic tubes or with the help of electric/electronic devices like teleprinter, telewriter, facsimile transmitters, television, etc. Some of these are briefly discussed below.

Messenger Service : The old system of employing a number of messenger boys to carry and deliver written messages and papers from desk to desk or from one department to another is still used by some organisations. But this system is necessarily expensive in terms of time, labour and cost. In large modern organisations this system has been replaced by a superior system known as Internal Mail Service or Interoffice Mail Service.

Internal Mail Service : This system operates on the same principles as postal mail service. A regular internal mail service is set up to collect and deliver internal mail from and to different departments or desks at regular intervals. Messengers visit all departments or desks or both at periodic intervals to deliver messages or papers meant for them and pick up messages and papers for delivery to others. Each department or desk keeps its outward mail ready to be picked by the messengers on their periodic rounds. This system saves much labour and time as it eliminates the necessity of employing separate messenger boys in each department for moving papers. The internal mail service should be well-planned and organised if it is to be effective and economical. The time-schedule for delivery and collection of papers should be fixed according to need. At least two to three deliveries should be made every hour. Delivery and collection of papers should be from desk to desk and not department-wise. This will save duplication of work. Messengers should be instructed to follow a definite planned route according to the time schedule for delivery of papers. Special messengers may be used to make unschedule trips to deliver urgent papers or messages.

8.6.3 Mechanical Devices for Delivery of Papers

Mechanical devices for delivery of papers internally include Conveyor systems, Chutes, Lifts, and Pneumatic Tubes. All these are costly to install and operate. These are suitable only for offices with a large volume of internal communication.

Conveyor systems : Conveyors of various types are used for carrying papers and documents from one desk to another. They work on the same principles as conveyor belts in factories. Motor driven canvas or belt, rollers, chains or wire are used to carry the papers horizontally or vertically. The belt or canvas may have single or multiple channel for carrying one set or several sets of papers at a time. Guides, clips or sandwich devices are used to hold the papers in position and guide the papers around corners or over aisles and railings. Where Roller or Wire Conveyors are used, papers are placed in containers which are fixed on the rollers or chains or wires. Horizontal and Wire Conveyors are used for moving papers on the same floor or level, while the Vertical Conveyor is used for moving papers from a lower to a higher floor and vice versa.

Chutes : These are metal or wood pipes or channels of wide diameter which run in a downward slope from an upper to a lower floor or level. Papers are placed in a container and dropped down the chute. This device is used when papers have to be transmitted in bulk from a higher level to a lower level.

Lifts : Where papers or messages have to be moved continuously between two or more floors a small lift can be used conveniently. The lift may be operated manually or it may be electrically or hydraulically operated. Papers are placed in a tray and put on the lift for upward or downward transmission.

Pneumatic Tube : This device is suitable where papers and documents have to be transmitted continuously and delivered at different points or work stations. A hollow metal tube runs continuously connecting different departments on the same floor or on different floors. Papers to be transmitted are placed in plastic cylinders and inserted in the tube at selected points. The cylinders are carried along the tube by air pressure and delivered at the receiving end.

8.6.4 Transmission of Messages Without Actual Delivery of Papers

A large part of the internal written communication in any office consist of messages which do not need the actual delivery of papers or documents. It is enough if the message contained in the paper is transmitted to its proper destination speedily and accurately. In such cases wire transmitters of various types are used. They facilitate accurate and high-speed transmission of written messages. Devices have also been developed for transmitting exact facsimile of typed or handwritten messages at high speed.

Although the wire transmitters are usually meant for use in external communication, in recent years they are finding wide use in internal communication also. These may be used conveniently for the transmission of messages to branch offices situated at a distance. However, wire transmitters are costly to install and maintain and can be used economically only in large organisations where the volume of internal communication is large.

Some of the commonly used varieties of wire transmitters are the Teleprinter (Teletypewriter), Telewriter (Teleautograph), Telefax and closed-circuit television. The function and working of some of these devices are briefly discussed here.

Teleprinter : It is also known as Tele-typewriter. It consosts of a machine with standard typewriter key-board. Each machine can send as well as receive messages. Any message typed on the sending machine gets simultaneously and automatically typed on the receiving machine. Automatic teleprinters provide for automatic typing of messages from a punched tape. Teleprinter service operated by the Telecommunication Department is known as **Telex**. A telex subscriber can send messages to any other telex subscriber through the central Telex Exchange.
Telewriter also known as Teleautograph, is a wire transmitter used for transmission of hand-written messages. The paper with the hand-written message is wrapped

around a metal drum on the machine. When the machine is switched on, the message is exactly reproduced on paper on the receiving machine.

Telefax : This is a transmitter which transmits the facsimile of written documents. An exact duplicate of anything written, typed or drawn on paper is automatically reproduced on the receiving machine at high speed. In one type of facsimile machine known as Desk-Fax or Fax, a scanner passes over the surface of the paper and converts the light and dark areas into impulses. At the receiving machine these impulses activate a marking device which 'burns' the exact image on a specially prepared paper.

Television : Closed-circuit television can also be used for internal communication. A written document placed before a TV camera can transmit an exact image of the document which can be viewed on the screen of the receiving set. Simultaneous transmission of the same image to several master viewers is also possible. It facilitates transmission of statistical or accounting data, documents and deeds, pages of bound books and registers, specimen signatures etc. from one department or branch to another. It improves customer service, reduces errors in transmission and saves time and labour.

8.7 CHARACTERISTICS OF A GOOD INTERNAL COMMUNICATION SYSTEM

Setting up of a good internal communication system is a major task of the office manager. A good communication system is one which helps to meet the communication needs of the organisation fully and effectively with maximum speed, accuracy and economy. Following are the characteristic of a good communication system.

1) **Simplicity :** The system should be simple to install and manage. The staff should be able to understand and operate the system without difficulty.

2) **Suitability :** The system should be suitable for the organisation for which it is meant. It should be capable of meeting the communication needs of the organisation adequately, effectively and economically.

3) **Speed :** The system must ensure speedy transmission of both oral and written communication. However, speed should not be achieved at the cost of accuracy.

4) **Accuracy :** The system should be able to ensure accuracy in transmission of both oral and written communication of all types. The very purpose of communication will be frustrated if inaccuracies develop due to any fault in the system.

5) **Safety :** The system should ensure that messages transmitted are not lost or miscarried in course of transit.

6) **Secrecy :** Not all communications are secret or confidential. But the system should have inbuilt mechanism for ensuring secrecy of confidential communication.

7) **Flexibility :** The system should be well-defined but not too rigid. It should be capable of being adapted to changes in the structure of the organisation.

8) **Economy :** The cost of organising and managing the system must not be too high.

Check Your Progress C

1) What is Telefax ?

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2) What is the differences between PABX and PBX?

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2) State whether the following statements are True or False?
   i) Paging system is a substitute for inter communication system.
   ii) PABX is used only for internal communication.
   iii) Conveyon system is used for carrying papers horizontally and vertically.
   iv) Face to face communication is nore effective than telephonic communication.
   v) Telewrite is used for transmitting typed messages.

8.8 LET US SUM UP

Communication is the process by which information or ideas are exchanged between individuals through a mutually understood language or symbol. Operating units and individuals in an organisation depend on timely supply of information for taking operating decisions. Also policy decisions of management are dependent on timely supply of pertinent information. To be effective, communication must occur timely, speedily and accurately.

Communication cannot occur unless the information, idea or opinion to be communicated is composed and transmitted and finally understood by the recipient. The process of communication consists of the following sequence of steps: ideation, composition, transmission, receiving, understanding and action. The different elements involved in communication are : the source of the communication or the sender, the destination or the receiver, the content of the communication, the language used in communication, the channels of communication and the means and methods adopted for transmission. Communication may be Internal, i.e. between individuals and departments of the same organisation, and External, i.e. between the organisation and its external contacts.

Internal communication may be classified into (i) Formal and Informal (ii) Vertical and Horizontal (iii) Downward and Upward. The two principal forms of communication are **Oral** and **Written**. Oral communication takes place between individuals through face to face conversation or through mechanical devices like telephone, intercom, executive systems, paging systems etc. Written communication involves distribution and delivery of intra departmental and interdepartmental papers and messages. It can be effected through human agency or mechanically, by actual delivery of papers or transmission of messages without actual delivery of papers.

The choice of form of communication depends on consideration of factors like speed and cost of communication, need for record, accuracy and the necessity of using costly equipment. The means adopted for oral communication are : Face to face communication, Telephones, Intercom, Executive systems, Paging systems, Dictating machines, television etc. whereas the means adopted for written communication are : internal mail service conveyor systems, chutes, lifts and pneumatic tubes. Transmission of written messages without actual delivery of papers can be effected with the help of various types of wire transmitters like Teleprinter, Telewriter, Facsimile systems (Telefax) and closed circuit Television. Setting up of a good internal communication system is a major task of the office manager. The characteristic features of a good internal communication system are Simplicity, Suitability, Speed, Accuracy, Safety Secrecy, Flexibility and Economy.

8.9 KEY WORDS

Conveyor systems: Mechanical devices used for conveying written communication to different departments or desks within the office.

External Communication: Exchange of information and messages between the organisation and its outside contacts.

Formal Communication: Internal communication which follows the channels of formal relationships in the organisation structure.

Horizontal Communication: Communication between managers and executives on the same level of hierarchy in the organisation.

Informal Communication: Internal communication which takes place between individuals and groups on the basis of informal relationships

Internal Communication: Exchange of information and messages between individuals and departments within the organisation.

Internal Mail Service: A service set up within the organisation for collection and delivery of internal mail through messengers.

Oral Communication: Communication between individuals through the use of spokenwords.

Paging System: System used in offices for locating or finding a members of the staff quickly.

Vertical Communication: Downward or upward communication between different levels of executives and staff within the organisation.

Wire Transmitters: Telegraphic machines used for speedy transmission of written messages without actual delivery of the papers.

Written Communication: Communication between individuals and departments through written media.

8.10 ANSWERS TO CHECK YOUR PROGRESS

A) 3   i) timely, accurate   ii) language   iii) accurate, complete   iv) sending, receiving   v) action

B) 2   i) False   ii) True   iii) False   iv) True   v) True

C) 3   i) False   ii) False   iii) True   iv) True   v) False

8.11 TERMINAL QUESTIONS

1) What do you understand by 'communication' ? How does it help in performance of the management functions ?

2) Mention the sequence of steps envisaged in the process of communication. What are the elements involved in the process ?

3) Explain the significance of internal office communication. Mention the types of inter-communication found in a modern office.

4) "Informal communication may be helpful in achieving organisational goals," Explain.

5) Explain the advantages of oral communication over written communication. Mention at least four mechanical devices used for oral communication.

6) "The means adopted for transmission of written communication are of two types." What are these? What methods and mechanical devices are used for this purpose ?

7) What are the characteristics of a good internal communication system?

8) Write explanatory notes on
   i) PABX   ii) Wireless paging
   iii) Facsimile transmission

Note: These questions and exercises will help you to understand the unit better. Try to write answers for them. But do not send your answers to the University. These are for your practice only.

UNIT 9 EXTERNAL COMMUNICATION

Structure

9.0 OBJECTIVES

After studying this unit, you should be able to :

- explain the need for external communication

- distinguish between different types of external communication

- identify the forms of external communication

- outline the stages in production of correspondence

- familiarise yourself with the methods of external communication.

9.1 INTRODUCTION

In the previous unit you have become familiar with various aspects of internal communication. External communication is the process of exchange of message and information with persons outside the organisation. It enables the management of a business to keep in touch with external persons and organisations, which is essential for successful conduct of business. In this you will leapt the need, types and forms of external communication. You will also be acquainted with stages in production of correspondence and the methods of external communication.

9.2 NEED FOR EXTERNAL COMMUNICATION

Communication is a vital tool of management. It helps in maintaining favourable relationships with outside contacts. The need for external communication arises from the necessity of keeping in regular touch with outsiders in order to carry on its business activities successfully. It has to enter into numerous transactions with outside persons and organisations in connection with sales, purchase, finance, marketing, collection of bills, etc. It must also be in touch with various external sources to secure information about market conditions, prospects of raising finance, changes in laws and rules affecting business operations and otper related matters. Above all, it has to project a good image among the customers, investors and the public in general through publicity in order to promote business and goodwill. All these necessitate a continuous flow of external communication.

Effective external communication Tlulicir

i) **Increased prestige** among its investors, customers, suppliers and the general pubuc. Neatly produced and promptly delivered communication invariably creates a favourable impression and enhances goodwi'.

ii) **Improved public relations** by keeping the public, including its investors, well informed about its activities. This helps in securing their understanding about the enterprise and its activities.

iii) **Improved business** by creating favourable relationships with customers, suppliers and the public in general.

9.3 TYPES OF EXTERNAL COMMUNICATION

External communication may be of two types : **Oral** and **Written.** You have already learnt in the previous unit the advantages and disadvantages of oral and written internal communication. Oral and written external communication have also similar advantages and disadvantages. However, all business concerns use both the types of communication in varying degrees depending on the nature of business and needs of particular circumstances.

9.3.1 Oral Communication

Oral external communication may be conducted in two ways : (a) Personal visits for face-to-face communication, and (b) telephonic communication. These are briefly discussed here.

a) **Face-to-face communication:** Personal visits for face-to-face conversation is an effective means of external communication. The greatest advantage of face-to-face communication is its effectiveness in getting quick results. The personal approach helps both sides to come to a speedy decision on any matter. It also helps in removing misunderstandings and resolving disputes. A business deal which may take weeks to finalise through written communication may be concluded through a single personal visit. However, it is costly and time consuming. Moreover, it does not provide a written record which may be necessary as evidence.

b) **Telephonic communication:** The telephone is the workhorse of the modern communication system. It is widely used for oral communication, both internal and external. The telephone can be used for oral communication with any outside person provided he is connected by telephone. Recent improvements in the telephone services and introduction of highly sophisticated telephone instruments have further enhanced its usefulness.

The greatest advantage of telephone as a means of oral communication is its speed and effectiveness. It saves overseas time as personal visits for oral communication are not necessa. /. However, it has also some drawbacks. Telephone calls to distant places or to overseas contacts are very expensive. Moreover, it does not provide any written record of the communication.

9.3.2 Written Communication

External communication through written media is the most effective means of maintaining favourable relationships with external business contacts. It constitutes the principal means of communication in any business office. Most of the business transactions of an enterprise are initiated, conducted and concluded through some form of written communication. Even transactions initiated or concluded orally have to be confirmed by written record of some type.

External written communication may take the form of letters, circulars, notices, memoranda or reports. It may also be in the form of formalised documents like orders, invoices, bills etc. The generic term correspondence is used to cover written communication of all types including letters.

The main advantage of written communication is that it provides a written record of the communication which can be preserved as evidence and for future reference. In order to ensure accuracy of the information transmitted, the message should be pre-planned. However, written communication also suffers from some drawbacks. It takes time to produce and deliver, which involves delay in getting results. It lacks the personal touch of face-to-face or telephonic communication, which is essential for getting quick results and solving complicated matters. Above all, the cost of production and delivery of written communication is comparatively higher.

Check Your Progress A

1) Distinguish between Oral and Written communication ?

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2) Which of the following statements are **True** and which are **False**.
   i) External communication helps in projecting a good image of the enterprise.
   ii) Face-to-face communication provides a written record of the conversation.
   iii) The greatest advantage of telephonic communication is that it is inexpensive.
   iv) Written communication is most effective in maintaining external relationships.
   v) Written communication may be in the form of orders and bills.

9.4 FORMS OF WRITTEN COMMUNICATION

Written communication may be in various forms. The most common and widely used form is the individually written letter. Other forms of written communication are notices, circulars, reports, memoranda etc. It can also take the form of stereotyped 'form' letters and other formalised documents like orders, invoices, bills etc. Broadly speaking the term 'correspondence' includes all forms of written communication including letters. But in a narrow sense, it commonly refers to individually written letters only.

The various forms of written communication have evolved in course of time to fulfil different needs and purposes. Individually written letters are needed to convey in precise and complete detail information or message relating to business matters. On the other hand, the purpose of a notice is to notify some information of general interest to customers, suppliers, investors etc. A circular letter serves the purpose of conveying some information or message of special interest to a large number of persons, viz., customers, investors and the public in general. A report is prepared to present some facts relating to a specific subject or problem, with or without the conclusion and recommendation of the writer.

Written communication through formalised documents like 'form letter, order, invoice etc. are used when the purpose is to merely convey some routine message or information in a brief and precise manner. These are written according to some well-established form and arrangement commonly accepted in the business world. Let us now discuss the nature, form and contents of some important types of writte communication.

Notices : A 'notice' is a written communication used for conveying some information of general interest to a particular class of external individuals, viz. customers, investors etc. or the general public. Its purpose is to make the persons particular class aware of some important information, briefly and clearly. A notice usually written in the form of an impersonal communication containing the message or information in clear, definite and unambiguous terms. There is no scope for personal solicitation or appeal in a formal notice. It is issued in general terms without addressing any individual by name.

The contents of a notice may vary according to the nature of the information or message to be conveyed. The different circumstances which necessitates the writing of a notice are : information to customers or suppliers about change in business arrangement or policy, convening meeting of shareholders, making calls on shares, declaration of dividend etc.

Circulars : A circular is a written communication conveying some message to a large member of persons, like customers, suppliers, investors or the general public. Its purpose is to circulate the same message to a large number of persons. The object of writing a business circular is not merely to convey some message or information, but also to arouse the interest of the recipient and invoke action or to promote business and goodwill. Consequently, it contains a personal appeal or solicitation and is somewhat more lengthy than a notice or an ordinary letter. Circulars are usually duplicated in large numbers to reduce the cost of production. But to impart a personal touch, the typewritten name and address of each recipient is inserted by typewritten and the facsimile signature of the writer duly stamped or printed on each circular letter.

The contents of a circular letter vary according to the nature of the message and the purpose for which it is written. The message or information intended to be conveyed through a circular may be some change in business arrangement or policy (viz. change in address or management structure or personnel, change in nature of products, change in prices etc.) or marketing of a new product or issue of new shares etc.

Reports: A report is a written communication in which, according to the nature and purpose of the report, the writer presents a collection of facts or a number of alternative propositions, states his conclusions and (if called upon to do so) submits his recommendations for action. The writer of a report may be an individual or a group of individuals (committee or sub-committee or board). It may be written at regular intervals as part of routine office activity or on special occasions at the instruction of a superior executive or body. Some statutory bodies like companies, cooperative societies etc. are required to prepare reports for submission according to provisions of law.

Reports may be of two types : Formal and Informal. **Formal** reports are prepared at periodic intersds as a routine activity and presented to a higher body or authority according to the established procedure. Routine reports are prepared by different departments of a business on sales, purchase, finance etc. and submitted to the general manager. informal reports are prepared by an individual or body on special occasions on the basis of facts and information gathered through inquiry or investigation into some specific subject or problem. These reports are presented to the superior body with the conclusions and recommendations of the writer.

Formal reports are prepared in the prescribed or recognised form. An organisation may prescribe the form in which its formal routine reports are to be prepared. Sometimes, the report is presented in a commonly recognised form. Statutory reports are prepared in the form prescribed by law. Informal reports are usually prepared in the form of a memorandum or a person to person communication. It may even be set up in the form of a letter.

Formal routine reports prepared by departments or executive of an organisation are meant for internal use and so form part of the internal communication. Informal reports prepared by the secretary of an executive or by a committee or sub-committee appointed by the management to study some specific problem are also part of the internal communication of the organisation. These are required by the management for making policy decisions. However, report may also form part of its external communication when outside agencies are involved. Formal statutory reports like the Annual Report of Directors and Author's Report are prepared by a company for submission to the Registrar of Compmes and for the information of outside contacts like the shareholders and the public. Reports of important meetings are usually prepared for publication in newspapers for the information of investors and the public. Sometimes, the management of an organisation may engage some outside agency or expert to inquire into some technical matter and require them to

Correspondence : Broadly speaking, the term 'correspondence' covers many types of written communication like letters, circulars, memoranda, reports, telegrams etc. But the term is commonly used to mean communication through letters. Letters form the most widely used media of external business communication. The main function of business correspondence is to open up and maintain external relationships, as well as to initiate, conduct and conclude business transactions of all types. It is sometimes called the life-blood of modern trade and commerce,

Letters are composed in the form of person to person communication. The format of a business letter has evolved in course of time out of custom and convenience and is now universally accepted. It usually consists of the inside address (i.e. name and address of the recipient), the opening salutation (viz. Sir or Dear Sir etc.), the body of the letter (i.e. the message), complimentary close (i.e. Yours faithfully etc.) and the signature and designation of the writer.

The contents of business letters may vary according to the nature of the message or information to be conveyed. These may be simple letters of routine nature like letters of acknowledgement or greeting, or may deal with more complicated subjects like inquiries, orders, complaints and their adjustment, collection letters etc.

Check Your Progress B

1) What is meant by a report ?

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2) What is the difference between Notice & Circular ?

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3) State whether the following statements are **True** or **False**.
   i)   A notice is written in the form of a person to person communication.
   ii) The purpose of a circular is to convey the same message to a large number of persons.
   iii) Informal reports are prepared on the basis of facts collected by independent inquiry or investigation.
   iv) The term correspondence refers to reports and circulars only.
   v)   A report may be prepared with or without any recommendation of the writer.

9.5 PRODUCTION OF CORRESPONDENCE

Correspondence is the most important form of external communication. Because of its many advantages, correspondence has become the chief means of written communication between a business concern and its outside contacts. The reputation and success of a business depends to a great extent, on the quality of its correspondence.

Apart from providing a written record of the message correspondence is the most effective means of maintaining favourable relationships with outside contacts. It allows information and messages to be conveyed clearly and accurately. This creates a positive image of the business and improves its prospects. The main purpose of office correspondence or business letters is to convey some information or message accurately and effectively and to evoke action. To achieve this purpose, the letter must not only be of good and effective quality, but it must also be produced neatly and promptly at an economical cost. One of the major tasks of the office **manager** is

to set up an efficient organisation and an effective system for production of correspondence.

The two principal interrelated stages in production of correspondence are :
(a) drafting of the correspondence, and (b) transcription (i.e. typing and duplicating) of the drafted correspondence. Let us discuss them in detail.

9.5.1 Drafting of Correspondence

How or by whom the correspondence will be drafted or composed will depend on the nature and importance of the message, volume of correspondence work, the type of organisation set up to do the work and the degree of mechanisation adopted. Different methods may be used by different offices for drafting correspondence.

Methods of drafting : Some of the usual methods of drafting used in modern offices are discussed below :

1) **Manual drafting** : This method is adopted for drafting difficult or complicated letters and those of confidential nature. This method is still used in some of those offices where the volume of correspondence work is small. However, in large organisations manual drafting is being gradually replaced by dictation, as manual drafting is both cumbersome and time-consuming.

2) **Dictation** : This method is used by managers and higher executives who find little time to draft letters by hand. Drafting of correspondence by dictation needs considerable expertise on the part of both the dictation and the shorthand writer or typist.

3) **Verbal or written notes** : Sometimes, busy managers or executives only dictate or write down the outline or points to be covered in the letter. The actual drafting is done by the secretary or some other correspondent. Printed forms or post cards with standard messages are used for the purpose. A correspondent or even a junior clerk can easily fill up the 'form' letter with variable particulars. It results in saving of time and cost in correspondence.

4) **Standard paragraphs** : Where the letter deals with standard situations of repetitive nature, like non-delivery of goods, inquiry from suppliers etc., a set of standard paragraphs prepared beforehand can be used to draft the correspondence. The paragraphs are serially numbered and the correspondent or dictator has merely to select the required paragraphs, and add the variable particulars to complete the drafting.

Methods of dictation

The four methods of dictation commonly used by busy executives for drafting of correspondence are : (i) dictation to a shorthand writer or stenographer; (ii) dictation to a machine-writing stenographer; (iii) dictation to a dictating machine; and (iv) dictation directly to a typist.

i) **Dictation to a shorthand writer** : This is the conventional method of dictation and still used in many offices. The executive dictates the letter and the shorthand writer or stenographer takes it down in shorthand, that is in phonetic symbols. Later he transcribes and types the letter in final form. The main disadvantage of this method is that it requires the simultaneous presence of the dictator and the stenographer in one place. This may not always be possible or convenient. Also it is expensive, as sufficient number of stenographers will have to be appointed to ensure that each executive gets exclusive service. However, this difficulty can be partly solved by having a Stenographic Pool.

Stenographic Pool : Under this arrangement, there is common 'Pool' of stenographers under an expert supervisor. All stenographers in the pool sit in a separate department. When a particular executive wants the services of a stenographer, anyone in the pool not otherwise busy attends the executive. Sometimes, an executive may like to have the services of a particular stenographer to do special or confidential nature of work. In that case, each executive may be given the first call on his particular stenographer. When not thus engaged, the stenographer may attend to other excutives. The pool

arrangement reduces the cost, as the workload is evenly distributed and fewer number of stenographers are required to do the work of the entire office.

ii) **Dictation to a machine-writing stenographer** : In this method, the dictation by an executive is taken down by the stenographer with the help of a machine instead of by hand. A portable stenographic machine, known as 'Stenotype' is used for the purpose. The machine has keys like a typewriter, but it prints phonetic symbols instead of alphabets. The transcription and typing is done by the stenographer in the usual way. This method also requires the simultaneous physical presence of the dictator and stenographer in one place and so suffers from the same disadvantage.

iii) **Dictation to a dictating machine** : In this method, the executive dictates the letter to a dictating machine instead of to a shorthand writer. The machine records the dictated matter on a cylinder or disc. When played back, the machine reproduces the dictated matter in the same voice and the stenographer or typist can type the letter in final form. Now a days, electronic recording machines using magnetic tapes or wire or discs are used for the same purpose. A single **spool** of tape or a disc can accommodate several letters and when the recorded matter is erased, the spool or disc is ready for fresh recording. The greatest advantage of this method is that, it does not need the simultaneous physical presence of the dictator and stenographer. The executive can dictate letters at his convenience, and the stenographer or typist can type the letter when he is free.

In large offices, where it is not possible or economic to provide a separate dictating machine to each executive, the Remote Dictating System is used. The telephone of each executive is connected to one or more recording machines kept in a central place. An executive can dictate letters through his telephone which is recorded directly in the central machine. Later, a stenographer or typist in the central pool can playback the machine and type the letters in final form.

iv) **Dictation directly to a typist** : In this method, the executive dictates the letter directly to the typist who simultaneously types the letter in draft or final form. Where the simultaneous presence of the dictator and the typist in one place is not possible, the executive can dictate the letter directly to the typist through the telephone. Using specially made head-phone or ear-phone, the typist can follow the dictation and type the letter in draft or final form. This method offers the advantage of direct transcription where the work is urgent, and results in saving of time and cost.

9.5.2 Transcription of Correspondence

Transcription of correspondence means converting the manually drafted or dictated letter into final form by typing and/or duplication. Correspondence of all types have to be typed or duplicated before they are despatched to outside contacts. Neatly produced correspondence not only reflects the efficiency of the office, but also enhances the image of the organisation by creating a lasting impression on the recipients. A well-planned organisation and system of transcription can help in achieving this objective.

Typing and Duplicating

Correspondence (letters, circulars, reports etc.) drafted or dictated by the executives are sent to the typists for typing or duplicating before they are made ready for despatch. The typing or duplicating work may be performed departmentally or may be centralised in a pool.

Usually two or more copies of each document have to be typed. An ordinary standard typewriter can produce up to ten legible copies by using carbon paper. An electric typewriter can produce up to thirty legible copies with carbon paper. Where larger number of copies of the same document are required, duplicating machines are used. A duplicating machine can produce up to 200 good copies from the same original or master. For still larger number of copies, some form of printing machine may be used for greater economy.

Organisation of Typing Work

There are two ways of organising typing work in a large organisation :
(a) Decentralised or Departmental Typing; and (b) Central Pool for Typing. Let us discuss them in detail.

a) **Departmental Typing** : It means performing the typing work of each department within the department itself by its own set of typists. This arrangement has the following advantages and disadvantages.

Advantages :
1) The work can be done efficiently as the typists are familiar with nature of departmental work.
2) Saves time as the typists can readily refer any discrepancy or error in the draft to departmental executive for rectification.
3) Typing of urgent letters can be done on priority basis according to necessity. Hence delay is eliminated.
4) Departmental typists develop a sense of loyalty which improves their morale and efficiency.

Disadvantages:
1) Workload is unevenly distributed within the office. Typists in some departments may be overloaded with work while those in some other departments may not have sufficient work..
2) Departmental typing is uneconomic as more typists have to be appointed than are justified by the total workload of the office.
3) Nois . created by typing disturbs the work of other staff in the department.

b) **Centralised Typing Pool** : Under this arrangement, all typists of the office are brought together in a 'Pool' and accommodated in a separate department or space. Typing work of all departments is sent to the pool. A qualified supervisor or senior typist is given the responsibility of allocating and checking the work of the pool typists. After typing, the typed documents are sent back to the departments concerned for signature.

Advantages : The centralised pool arrangement has the following advantages :
1) It ensures even and fair distribution of workload among typists.
2) It results in overall economy in office cost.
3) It ensures better supervision by a qualified supervisor.
4) Pool typists being accommodated in a separate room there is no disturbance in departmental work due to noise.

Disadvantages : The pool arrangement also suffers from the following disadvantages:
1) Pool typists do not have any touch with departmental staff or work. Consequently they lose personal interest in the work which may affect their morale and efficiency.
2) If the work is of a too technical or specialised nature, the pool typists may face difficulties in coping with the work. It frequently delays work as typists have to refer errors or discrepancies in the draft to the departments for rectification.

Mechanical Aids to Transcription Work

Transcription of correspondence, i.e., typing and duplicating is done with the help of various types of mechanical devices. Typewriters and Duplicating machines of improved types have been developed to speed up transcription work at reduced cost. Some of the more important devices are discussed below.

Typewriter

The typewriter is the most commonly used machine for typing correspondence of all types. There are four main types of typewriters in use: i) Portable typewriter ii) Standard Manual typewriter iii) Standard Electric typewriter iv) Automatic typewriter.

i) **Portable typewriters** are light and compact machines of small size. They incorporate the main features of the standard typewriter excepting the facility for

tabulation. These are commonly used by executives for typing letters of personal or confidential nature.

ii) **Standard manual typewriters** are of bigger size having carriages of different lengths for doing different types of work. The keyboard usually has 45 keys giving 90 characters, both alphabets and figures. It has tabulating facility needed for typing invoices, statistics etc. As the name implies, the typing is done by hand. The original and up to 10 good copies can be produced in this machine with carbon paper. A variation of the ordinary standard typewriter is the **Variable Typewriter**. It enables typing to be done in various styles and sizes of typefaces. Instead of types carried on fixed bars, this machine uses inter-changeable circular blocks (known as 'golfballs') bearing different sizes and styles of types. These machines are used for typing sales letters, statistical reports etc.

ii) **Electric typewriters** are standard machines operated by electricity. Typing is done manually to activate the keys. The keys produce uniformly perfect impressions at high speed. The movement of the carriage and margin settings are controlled automatically. Up to 30 good copies of the original can be produced by using carbon paper. It has the advantage of high speed typing with minimum fatigue to the typist.

iv) **Automatic typewriters** can type documents automatically from a punched or recorded matter. It operates on the same principle as an automatic player piano. The master is prepared by punching coded text of the letter on paper tapes or stencils or recorded on magnetic tapes or discs. When the master is placed on the machine and it is switched on, the letter is automatically typed on paper at high speed. Typing at high speed results in saving of manpower and cost.

Duplicators

Duplicating is a substitute for printing. It has the advantage of producing multiple copies of a text, speedily and economically.

Various types of duplicating processes and machines are commonly used in modern offices. The two main types of duplicating processes are : i) Spirit duplicating, and ii) Stencil duplicating. Other types of reprographic processes and machines used are Multigraph, Letterpress Printing Duplicator, Offset Lithography etc.

The Spirit duplicating and Stencil duplicating processes are discussed below.

i) **Spirit duplication** : This process is also known as hectographic process. It is a cheap and quick process and can be used by the staff with little training. In this process, the master is prepared by typing or writing on a sheet of glossy paper backed with a hectographic carbon. This produces a reverse impression of the text on the back of the paper. When the master is brought in contact under pressure with duplicating paper moistened with spirit, the carbon impression on the master dissolves and leaves an imprint on paper. 300 to 450 copies can be obtained from a single master.

Hectographic duplicating machine is usually of the rotary type. It can also be Flat-bed type. In the Rotary machine, the master is fixed on a drum or cylinder so that the carbon impression is on the outside. When the drum rotates, paper gets automatically fed and moistened with spirit and the impression is made on copy paper. The machine can be operated manually or electrically. It can produce 60 to 150 copies per minute.

In the Flat-bed process, the original text is written on paper with hectographic ink or typed with hectographic ribbon or carbon. The paper is then pressed against a flat gelatine surface which receives the impression and becomes the master. Sheets of copy paper dampened in spirit are pressed on the gelatine bed to obtain copies.

ii) **Stencil duplicating** : In this process, the master is cut on a stencil by typewriter (with the ribbon removed) or by hand using a steel pen. The stencil is made of fibrous material coated with plastic. The stencil is placed on the inked drum of the machine. When the drum rotates, copy paper is fed between the drum and

the pressure roller and so receives the impression. One master stencil is good for producing 500 to several thousand copies. It can also be preserved for future use.

Stencil duplicator or Mimeograph machine can be operated manually or electrically. It has self-inking device and paper is fed automatically. It can produce 60 to 200 good copies per minute depending on the type of machine used.

9.5.3 Centralised vs. Decentralised Correspondence

The principal objective of organising correspondence work is to set up an efficient system which will produce letters which are of good quality and effective at economic cost. In organising correspondence work, the main question before the office manager of a large organisation is whether to centralise or decentralise the correspondence work. Let us discuss them in detail.

Centralised Correspondence : In a centralised plan, drafting of correspondence is done in a central correspondence department by trained staff under the supervision of a qualified supervisor. Departments are relieved of all correspondence work except those requiring special attention of departmental executives.

Advantages : Centralised correspondence has the following advantages:

i)   Trained staff provide uniform and high quality correspondence work.
ii) It increases the output of work.
iii) Continuity of policy and approach towards customers can be maintained in all correspondence emerging from the office. This results in better relationships with customers and improves goodwill.
iv) All correspondence being drafted by the same set of staff help in maintaining a uniformly high standard in correspondence of the entire organisation.

Disadvantages : Centralised correspondence also suffers from the following disadvantages :

i)   Staff attached to the central department have frequently to interrupt the work of departmental staff to elicit, check or verify information. This creates disturbance in departmental work.
ii) Drafts of letters prepared by the centralised staff are based on secondhand information from departments. This may result in weak and inaccurate letters.
iii) The need for referring drafts to concerned departments for necessary adjustments cause unnecessary delay, and may also necessitate lengthy correspondence with customers.

Decentralised or Departmental Correspondence : Where the correspondence is of specialised nature, decentralised or departmental correspondence is more convenient. In the decentralised plan, all correspondence work of each functional department are performed within the department by its own staff. The correspondence work is done under the control and supervision of departmental manager and executives.

Advantages : Decentralised correspondence has the following advantages.

i)   The letters drafted by departmental staff are based on first hand information and, therefore, are more accurate and effective.
ii) Information needed for drafting is available within the department itself and there is no need to refer the matter to other departments. This eliminates unnecessary delay and work is speeded up.
iii) Departmental loyalty enhances the morale and efficiency of the clerical staff of the department.

Disadvantages : The main disadvantages of departmental correspondence are as follows.

i)   Departmental clerks lack the specialisation which is essential for drafting high quality and effective letters. The output of work is also lower.
ii) Lack of expert supervision often results in drafts of poor quality or full of errors and inaccuracies.

iii) Letters emerging from different departments vary widely in quality and approach which reflect a poor image of the organisation.

Check Your Progress C

1) What is Stenographic Pool?

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2) Distinguish between Centralised and Decentralised correspondence.

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3) Fill up the blank spaces in the following statements
   i)   Manual drafting is used in the case of .... and .... correspondence.
   ii) 'Form' letters are used for conveying .... information and messages.
   iii) .... machines are used by .... for drafting letters.
   iv) Transcription means .... and .... correspondence.
   v)   In .... correspondence plan, all letters are drafted .... in a central department.

9.6 METHODS OF EXTERNAL COMMUNICATION

Different methods and means are used for external communication, both oral and written. For oral external communication, the principal means used is the telephone. The methods commonly adopted for transportation and transmission of written external communication are of the following types :

i) For actual delivery or transportation of the written communication the methods used are the postal mail, messengers, courier service, etc.
ii) For transmission of the written message without actual delivery of the document, the methods usually adopted are telegraph service, teleprinter, telefax or fax, teleautograph, etc.

Some of the more important methods of external communication are discussed here.

9.6.1 Methods of Oral External Communication

The principal method adopted for oral external communication is the telephone. Different types of telephone instruments used in modern offices are discussed below.

Telephone

The telephone is the most common and useful method of oral communication because of the speed and facility of direct personal contact. The development of telephone services and invention of improved types of telephone instruments have increased its usefulness tremendously.

A large organisation usually installs a number of indirect telephone lines through Telephone exchange for conducting external communication. These lines are connected with the internal exchange lines through the PBX or PABX switchboard. Any department or executive of the organisation can communicate with any outside party by dialling a direct exchange line through the PBX switchboard.

The telephone services offer various facilities to telephone subscribers for making calls to individuals situated anywhere, within or outside the country. According to the distance involved, telephone calls are of three types : Local, Toll and Trunk or Long-distance. Charges for telephone calls are made according to the type of call.

Trunk or Long-distance calls may be Inland (i.e. with persons within the country), or International (i.e. with persons outside the country). Long-distance calls can be made either by booking calls through the Telephone Exchange or by direct dialling by using the Subscriber Trunk Dialling (STD) or International Trunk Dialling (ITD) facilities. Business offices can also avail of various special facilities offered by the telephone services for making inland trunk calls. Some of these facilities like Trunk calls from Public Telephones, Reversed Charge Calls, Fixed Time Calls, etc. are very helpful in external communication.

In advanced countries, improved varieties of telephone instruments and equipments have been introduced which have vastly increased the utility of telephone as a means of external communication. Some of these are: Cordless telephone, Answering and Answer Recording equipments, Automatic Dialling Device, etc.

9.6.2 Methods of Written External Communication

The methods adopted for transmission of written communication are of two types : i) methods adopted for transmission with actual delivery of the documents, and ii) methods adopted for transmission without actual delivery of the documents. Let us discuss them in detail.

i) **Transmission with actual delivery of documents** : The usual methods adopted for this purpose are the Postal Mail Service, Messengers and Courier service.

Postal Mail : Postal mail is the most widely used method for delivering written communication to any destination within or outside the country. It is the cheapest and safest method of transmission of written messages of any types. Even money remittances by cash, cheque or bank draft can be sent safely through the postal mail service.

Postal mail service offers various facilities for cheap transportation of postal articles of all kinds, viz. letters, parcels, books, patterns and samples. Money remittances can be sent by ordinary money order, telegraphic money order, postal order etc. to any address within the country. For safe and guaranteed delivery of postal articles, various facilities like **Recorded Delivery, Registered Post, Insured Post,** etc. are available at relatively cheap cost. **Speed Post service** ensures fast transportation of letters and parcels. Some other facilities offered by postal main service are meant exclusively for business concerns. Some of these facilities are : **Value Payable Post, Book Post, Patterns or Sample Packets, Post Box and Bag, Business Reply Card and Envelope** etc.

Messengers : Written communication can also be delivered to external contacts through messengers employed by the office. Besides the messengers engaged in the internal mail service, a few messengers can be engaged to carry written communications to outside parties and organisations situated within the city.

All outgoing mail collected by internal messengers from different departments are delivered to the central Mailing Department. The staff in the mailing department sort out the mail which is to be sent by messengers. These are then entered in a Peon Book with particulars like date, serial number, name and address of the recipient, nature of document, etc. The messenger carries the articles to be delivered along with the Peon Book in acknowledgement of receipt. The external messenger service should be well-planned and organised to achieve its purpose with minimum labour and cost. The time-schedule of delivery through messengers should be fixed according to need, preferably two or three times a day. The routes to be followed by the external messengers should be carefully planned to avoid unnecessary travel and wastage of time. In case of urgent messages, delivery can be arranged through special messengers.

Courier service : Postal mail is the cheapest but not the quickest method of transportation of written communication. Air Mail delivery is faster, but it is comparatively expensive and has other limitations. Delivery of written communication through office messengers is quicker, but not suitable for transportation outside the city or town of origin.

Business firms nowadays prefer to utilise the services of private agencies called Courier Service for quick and safe transportation of written communication. Courier service can be utilised for fast transportation of all kinds of written communication, including parcels and packages of limited bulk, to any destination within or outside the country. Some offices even use Courier Service for delivery of mail within the city to avoid the cost of maintaining a messenger service of its own.

Courier service is also a kind of messenger service operated by private agencies. Various methods of transport, including air transport, are used to carry letters, parcels etc. for delivery within the shortest possible time. Although it is expensive, it is economic in the long run. It is particularly useful where urgent letters and parcels have to be delivered quickly to external contacts.

The Speed Post service offered by postal authorities in our country is also a form of courier service. However, it has some limitations as letters and parcels can be sent by Speed Post only through selected large Post office and selected cities in the country. Delivery is made quickly, but the charges are very high.

ii) **Transmission without actual delivery of documents** : Various methods are used for transmission of written communication without actual delivery of the document. Some of these methods are the **Telegraph service, Teleprinter, Telefax or Fax, Teleautograph** etc.

Telegraph : Telegraph is a well-known and commonly used method of transmission of written communication. Telegrams are preferred by business firms for sending urgent messages as they attract immediate attention and evoke prompt action. As it is rather expensive, it is used selectively for sending short messages in urgent business situations only. Telegraphic communication can be sent to telegraph offices of selected post offices which accept telegraphic messages for onward transmission.

Cablegrams or wireless telegrams are used for transmission of written communication to foreign countries. With the development of Satellite Communication System, transmission of message through cablegrams has become an effective method of speedy transmission of written communication.

The cost of sending telegraphic messages varies with the length of the message, the distance involved and the class of the telegram. According to urgency of the message, telegrams are classified into three categories : Urgent, Express and Ordinary. Sliding rates of charges are made for different classes of telegrams. Charges of telegrams also vary according to their length, that is the number of words contained in the message. The name and address of the recipient is also charged, but no charge is made for the name and address of the sender. Sometimes, code words are used in composing the telegraphic message to economise in cost. Telegraphic codes usually consist of words or combination of letters, each of which stand for a whole sentence signifying a standard message. A business firm may use its own private code or any one of the internationally accepted telegraphic codes.

Teleprinter : Written communication can be transmitted to customers and other outside contacts of a business firm through the Teleprinter network. This is both a speedy and economic method of transmission of written messages even when the distance involved is long.

The teleprinter, also known as Tele-typewriter, is a machine with standard typewriter keyboard which works like a telegraph instrument. Each machine can both send and receive messages. Any message typed on the sending machine is received by the receiving machine and typed automatically on paper. In the Automatic Teleprinter machine, the message is typed automatically from a punched paper tape and transmitted. The Teleprinter service operated by the Telecommunication department is known as Telex. Like telephone, all Telex machines are connected with the central Telex exchange and any Telex subscriber can send messages to another subscriber through the Telex exchange. A business concern can install its own Teleprinter machine or may get the message transmitted through the teleprinter service operated by private agencies.

Telefax or Fax : It is a facsimile reproduction and transmission system now being used increasingly for transmission of written messages. Anything written, typed or drawn on paper can be transmitted by this machine automatically and reproduced on the receiving machine. The use of the Fax machine makes it possible to transmit and reproduce the exact replica of the original document at the receiving end, speedily and accurately. Like the teleprinter, the Fax machines are connected by wire or cable to the telegraph network. Different types of fax machines are in use. In one type of fax machine, a scanner passes over the surface of the paper to be transmitted and converts the dark and light areas into corresponding impulses. At the receiving machine, a marking device activated by these impluses 'burns' an exact image of the writing on a specially prepared paper.

In India, fax service is provided by the Telecommunication Department. Charges vary according to the size of the document to be transmitted and the distance involved. Fax messages can be sent through the telegraph offices on payment of the special charges. A business office can install its own Fax machine or may take the help of private agencies having Fax machine to send messages.

Check Your Progress D

1) What is the difference between Telegraph and Teleprinter ?

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2) What do you understand by Facsimile reproduction ?

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3) State whether the following statements are True or False.
   i) Trunk telephone calls are made to contact only foreign customers.
   ii) Postal mail is the cheapest method of delivery of written communication.
   iii) Telegraphic code is used to economise the cost of telegram.
   iv) Messengers are used to deliver messages in any part of the country.
   v) Telegrams can be sent through telephone and teleprinter.

9.7 LET US SUM UP

External communication is the process of exchange of information and messages with persons outside the organisation. It enables management to keep in touch with external contacts for successful conduct of business operations and to project a good image of the enterprise. External communication may be oral or written. Oral communication may be conducted through face-to-face communication or telephonic communication whereas written communication may be in the form of letters, circulars, memoranda, reports etc.

Letters are written for the purpose of conveying a message with **precise and details**. Notices are meant for notifying some information of general interest, whereas circulars are meant for circulating some information among large numbers of people and memoranda to bring some problem to the notice of some authority. Reports are prepared to present some facts relating to some specific subject. Correspondence includes all types of written communication including letters. Different methods used for drafting correspondence are : manual **drafting, dictation, verbal** or written notes for drafting, form letters, standard paragraph etc. The four methods for giving dictation are : dictation to shorthand writer, dictation to macine-writing stenographer, dictation to a dictating machine and dictation directly to a typist.

Transcription is the method of converting the drafted correspondence into final form by typing or duplicating.

There are two ways of organising typing work—decentralised or departmental typing and centralised typing pool. Typewriter is the most commonly used machine for typing work. It may be portable, standard manual, standard electric and automatic. Duplicating is a substitute for printing. The two main types of duplicating processes are spirit duplicating and stencil duplicating.

The organisation of correspondence work may be centralised or decentralised. Different methods are used for transmission of oral and written external communication. Telephone is the most widely used method for oral communication. Methods adopted for transmission of written external communication with actual delivery of documents are postal mail, messengers and courier service. Courier service is the most effective method for quick delivery of urgent messages. The methods adopted for transmission of written communication without actual delivery of papers are : Telegraph, Teleprinter, Telefax or Fax etc. Telegraph is a commonly used method for transmission of written messages over any distance. Whereas Teleprinter can be used for speedy and economic transmission of written messages. Fax is a facsimile reproduction and transmission system, which transmits replica of any written message at a very high speed.

9.8 KEY WORDS

Automatic typewriter : Electric typewriter which automatically types a message from a punched tape or stencil or from magnetic tapes/discs.

Circular : A letter which circulates or conveys some message to a large number of persons of a particular class of the general public.

Correspondence : Broadly it covers all written communications including letters, but in a narrower sense it refers to letters.

Centralised correspondence : The arrangement for drafting of correspondence by trained correspondents in a central department under the supervision of an expert supervisor.

Courier service : Service provided by private specialised agencies for transportation of letters, parcels etc. on payment of charges.

Dictaphone : Dictating machine used by executives for drafting of letters.

Fax : Facsimile reproduction and transmission system which is used for transmission of exact replica of written messages over any distance at great speed.

Postal mail : Method of delivery of written external communication through the agency of Postal service.

Report : A written communication in which the writer presents some facts or some alternative propositions, states his conclusions and submits his recommendations, if required.

Stencil duplicator : A duplicating machine which uses a stencil cut by hand or typing as master for producing multiple copies or a written message.

Transcription : The act of converting drafted or dictated correspondence into final form by typing and duplicating.

Typing Pool : A centralised arrangement in which all typists of the office are brought together in a central department to perform typing work of the entire office.

9.9 ANSWERS TO CHECK YOUR PROGRESS

A) 2 (i) True (ii) False (iii) False (iv) True (v) True

B) 3 (i) False (ii) True (iii) True (iv) False (v) True

C) 3   (i) complicated, confidential   (ii) routine
        (iii) Dictating, executives   (iv) typing, duplicating
        (v) Centralised, correspondence

D) 3   (i) True   (ii) True   (iii) True   (iv) False   (v) True

9.10 TERMINAL QUESTIONS

1) What are the different means of oral external communication? What are their respective advantages?

2) What are the purposes for which written external communication is conducted ? What are the advantages of written communication ?

3) What do you mean by correspondence ? State the advantages and disadvantages of centralised correspondence.

4) Name and explain briefly the different methods of drafting correspondence

5) Explain the different methods of dictation used in offices.

6) What is a Typing Pool ? How does it differ from departmental typing ? What are the main advantages of Pool arrangement ?

7) Write explanatory notes on :
    i)   Circular letter;   ii) Electrical typewriter;
    iii) Spirit duplicator;   iv) Courier services;
    v)   Telegraphic code;   vi) Fax

Note: These questions and exercises will help you to understand the unit better. Try to write answers for them. But do not send your answers to the University. These are for your practice only.

SOME USEFUL BOOKS

Chopra R.K., 1990, *Office Management.* Himalaya Publishing House, Delhi.

Gupta C.B. 1990. *Office Organisation and Management,* Sultan Chand & Sons: New Delhi.

Prasanta K. Ghosh, 1991, *Office Management.* Sultan Chand & Sons, New Delhi.

Rao V S P and P.S. Narayana, New Edition, *Text Book of Office Management.* Tata Mc Graw-Hill Publishing Company Limited, New Delhi.

Block

3

OFFICE MACHINES AND DATA PROCESSING

Expert Committee

Course Preparation Team

BLOCK 3 OFFICE MACHINES AND DATA PROCESSING

Now-a-days it is difficult to think of an office without machines such as typewriter, duplicator, calculator, photocopier, etc. In general, machines and equipment are used in offices to save time and labour, promote accuracy of work, and to perform repetitive operations which cause monotony. In fact, the modern office manager looks upon machines and equipment as an useful means of ensuring smooth and efficient operation of work in the office. The major problem lies in determining which and what kind of office machines and appliances should be used. The office manager has to exercise his judgement while selecting such devices. It may be noted that once a machine is purchased and it is found not serving the purpose for which it is bought, it is very difficult to replace it. Moreover, purchase of a machine means long term investment of funds. Therefore, care should be taken to purchase the right kinds of machines at the right time.

Today organisations of all types maintain records, process data and use it in decision making. The technology of data processing has had a quantum leap forward especially during the last two decades. Use of computers in the offices is increasing rapidly for the purposes of data processing and storage, and preparation of letters, documents, payrolls, price lists, inventory management, etc. In this block we discuss in detail about the office equipment and machines, data processing and use of computers. The block consists of four units.

Unit 10 deals with the definition, objectives and importance of office mechanisation, factors influencing the decision relating to office mechanisation and broad categories of office machines. It also explains the uses of copying and duplication machines.

Unit 11 discusses the working and uses of accounting, tabulating, computing and communication machines.

Unit 12 explains the nature and importance of data and information, need for data processing, types and sources of data and methods of data presentation.

Unit 13 is concerned with the use of computers in office management. It describes various component units of computers, input and output devices, types of softwares used, computer applications in office management, and advantages and limitations of computerisation of office work.

UNIT 10 OFFICE EQUIPMENT AND MACHINES-I

Structure

10.0 OBJECTIVES

After studying this unit, you should be able to:

• define office mechanisation

• explain the importance and objectives of office mechanisation

• outline the factors determining mechanisation of office work

• classify various types of office machines

• describe the uses of duplicators, photocopiers and different kinds of typewriters.

10.1 INTRODUCTION

Office machines and equipments happen to be the integral parts of the modern office. They are very often considered as time and labour saving 'devices'. A variety of machines and equipments are available for different operations in the office.

In this unit, you will study the definition, objectives and importance of office mechanisation, factors governing the decision relating to office mechanisation and broad categories of office machines. You will also study the uses of different kinds of typewriters, duplicating machines and photocopiers.

10.2 MEANING AND IMPORTANCE OF OFFICE MECHANISATION

Office mechanisation refers to the process of introducing the use of machines and equipment in place of manual operation of office work with a view to increase efficiency and output, and reduce office cost. It means the replacement of normal operations wherever possible and where useful.

Mechanisation of office is preferred mainly to improve efficiency of work save time. reduce clerical cost, ensure accuracy, relieve the staff from monotony and to provide a safeguard against fraud. Work done by machines is neat and clear, and results in greater output. Machines are installed not only to facilitate quick handling of work but also to improve efficiency. Thus the importance of mechanisation lies in the benefits which may be expected from it.

However, office mechanisation has significant financial implications. Capital is required for purchasing machines, equipments, accessories, etc. It also involves additional cost in the form of insurance premium, cost of accommodation, stationery, maintenance and repairs, etc. Machines are to be operated by skilled operators whose salaries also add to the cost substantially. Highly sophisticated machines like computers need special accommodation which also leads to increase in cost. Therefore, the decision to mechanise office operation should be based on cost considerations.

10.3 OBJECTIVES OF OFFICE MECHANISATION

The major objectives of introducing machines and equipment in the office are as follows:

1) **To increase efficiency:** Machines speed up office work and save time which can be utilised for some other operations in the office. Thus, efficiency of office work is increased.

2) **To save labour time:** Machines are installed to save labour time and clerical costs. To arrive at such decision, the cost of a machine should be compared with the estimated savings in labour costs over the life of that machine. However, economy in labour cost is not always the deciding criterion. Sometimes, machines are introduced to get better quality of work and also to minimise mistakes and fraud.

3) **To achieve accuracy:** Mistakes are quite common when office operations are performed manually. Mechanisation helps in promoting accuracy and minimising mistakes. Many offices use calculating and accounting machines to provide a check over manual work because benefits obtained from accurate work are far more valuable than the cost of such machines.

4) **To minimise chances of fraud:** Office machines may be installed to reduce the chances of fraud in the organisation. For instance, a cheque writing machine may be introduced to minimise chances of fraud even though the number of cheques to be issued everyday may be small.

5) **To increase employee morale:** Office activities which are repetitive and monotonous in nature, if carried out manually, will amount to drudgery. Use of machines in such cases eliminates monotony of work. This improves the morale of employees because machine operations provide considerable relief to them by eliminating manual efforts in repetitive jobs.

Check Your Progress A

1) Define the term 'Office Mechanisation'.

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2) List out the objectives of office mechanisation.

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3) Which of the following statements are **True and which are False?**

   i) Office mechanisation does not **require additional space in the office.**

   ii) Machine work is introduced in the office just to give it a modern look.

   iii) Office mechanisation requires investment of additional capital.

   iv) Speed of work is not the only objectives of introducing office machines.

   v) Use of some office machines may be beneficial even when the volume of

10.4 ADVANTAGES OF OFFICE MECHANISATION

The following advantages may be derived by mechanising the office operations :

1) **Improves quality of work**: Machines do the work neatly and systematically. Thus mechanisation improves the quality of work done in the office.

2) **Economy in operations**: Operating costs per hour of work decline with the use of machines. With the help of machines, employees can do their work with greater speed. This leads to saving in salaries paid to employees. Moreover, some machines can perform a number of operations simultaneously which may also reduce the cost.

3) **Increases efficiency**: The speed of work is greatly increased with the help of machines. The work that may take hours to finish with manual labour may be completed in no time with the help of machines. Improved efficiency leads to greater profitability and at the same time creates a good image in the minds of the people who deal with the organisation.

4) **Greater accuracy**: Machines ensure greater accuracy Chances of errors are almost eliminated. Thus, bottlenecks and delays are minimised and the work goes on smoothly.

5) **Standardisation of routines**: Mechanisation helps to facilitate standardisation of office routines and procedures. Ultimately it results in better coordination of work.

6) **Facilitates control**: Machines help the managers in exercising greater degree of control over their subordinates. For instance, time recording machines ensure presence of staff. Accounting machines minimise fraud and fix responsibility for various accounting operations.

7) **Relieves monotony**: Repetitive work is normally boring and time-consuming. Mechanisation reduces the monotony of doing repetitive work. As a result, the employees engaged in performing repetitive jobs are somewhat more contented then they would be if machines were not used.

10.5 DISADVANTAGES OF OFFICE MECHANISATION

As you know, machines do ensure speedy and accurate performance of office work and thereby affect saving in clerical cost. But this may not always be possible due to the following disadvantages or limitations:

1) **High installation costs**: Procurement of a machine for the office needs funds which may not be possible for small firms. For example, duplicators, computers, addressing machines, etc., are quite costly. Only the big offices can buy such expensive machines. Moreover, the operation costs of certain machines are also high. Computer is an example in this regard. Small offices may not be able to bear the cost of installation and operation of such equipment and machines.

2) **Breakdown cost**: Breakdown of an office machine may incur heavy losses to the firm. With the breakdown of a machine, the work will be heldup in the office. This may also lead to dislocation of work in many departments. The real cost of breakdown of a machine is much higher than the cost incurred on its repairs.

3) **Under utilisation**: The office devices may not be used to the fullest possible capacity because alternative uses may not be possible. It may prove **uneconomical to use such machines**.

4) **Inflexibility of office systems**: Use of office machines tends to make the office system inflexible. Some machines require special skill for their operation. If the operator is absent or not available, the machine will remain idle and the work will suffer.

5) **Training of staff:** Office workers need training to operate office machines. Where sophisticated machines are involved, the training period may be long and costly which may not be justified by the use to which such machines may be put.

6) **Employees reshristance:** Mechanisation reduces the need of labour. It may create unemployment problem. For this reason employees' unions always resist mechanisation of office operations. Unless the surplus labour can be given alternative employment, it is not advisable to introduce mechanisation.

7) **Risk of obsolescence:** Many machines have a high degree of obsolescence. They may become out of date before the expected utility is derived out of them. In order to avoid this risk, it is advisable to use only such machines which have multiple uses.

8) **Miscellaneous problems:** Some machines like calculators, typewriters, etc., are mobile, while other like duplicators, photocopiers and computers cannot be easily taken from one department to another. Some machines require more space for their operation. Noise created by some office devices may distract the attention of office staff.

Thus, mechanisation of office should not be attempted to give it a modern look only. The decision to buy any machine should be taken only after careful consideration of its benefits and limitations.

Check Your Progress B

1) Enumerate the disadvantages of office mechanisation.

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2) Which of the following statements are True and which are False?
   i)   Office mechanisation brings about improvement in the quality of work.
   ii) Office mechanisation may be desirable even if it increases the total cost.
   iii) Office machines and equipment may be uneconomical to use if the volume of work is not large enough.
   iv) Employees need training when new machines are introduced.

10.6 FACTORS DETERMINING OFFICE MECHANISATION

It is neither possible nor desirable to replace all manual operations by machines. The basic purpose of using machines is to save time and labour of office staff, increase office efficiency and reduce the cost of office administration. Office mechanisation requires due consideration of a number of factors. Now let us understand the basic principles which should be kept in mind while deciding about the introduction of office machines and equipment.

1) **Usefulness:** The basic consideration in deciding upon office mechanisation should be its usefulness in terms of the benefits expected from it. If a machine is really useful, it may be purchased even if it is little costly. On the other hand, if a machine is not useful, it should not be purchased even if it is cheaply available. Here, both the present and the future utility of the machine should be taken into account. For example, if a particular machine is required only for a short period, it may be economical to hire one for the period required.

2) **Accuracy:** Sometimes accuracy is the major purpose of mechanisation. The machine which gives accuracy and saves time in checking as well as minimises the possible annoyance caused by errors should be introduced in the office.

3) **Choice of machines:** Once mechanisation is decided upon, the office manager should select those machines which are more suitable. Different types of machines for the same use are often available in the market. Choice of machines ought to be made taking into account the following aspects:

i) **Durability:** A machine is used by different people under varying conditions. Unless it is strong and durable, it would not be a good investment.

ii) **Adaptability and multiple use:** A machine which is adaptable for various uses has greater utility than a single-purpose machine. A multipurpose machine may not remain idle as it may be used for more than one purpose. A multipurpose machine may be relatively more costlier but may be more economical.

iii) **Portability:** As far as possible, preference may be given to a machine which can be moved from one user to another user, or from one place to another, in the same work area. Compactness and ease of handling save time and energy and increase the use of the machine.

iv) **Standardisation:** Standardisation means having a few different makes of machines as is consistent with quality and quantity of work in the office. It is desirable to use machines of standard size and model in order to: a) obtain lower prices through bulk purchases, b) develop, if necessary, company's own service department more economically, c) train operators easily, and d) procure and use office forms to fit the makes of the machines.

v) **Easy operation and training of operations:** While buying the office machines, you should prefer those machines which are easy to operate and for which it is easy to train the operators for handling them. For instance, in the case of an accounting machine, you should look for a convenient keyboard, simple motor bars, proper control keys, uniform action of all the keys and levers, quiet operation, and neat printing.

vi) **Availability of repairs and maintenance services:** Reliable and continuous operation demands quick repairs and proper maintenance of machines. A machine which can be serviced promptly has advantage over the one which cannot be so serviced. Thus, the availability of service facilities is also an important consideration. For this purpose, the sincerity of the manufacturer and the supplier should be examined before buying a particular brand of machine.

4) **Continuous utilisation:** Office machines and equipment should be introduced only if the volume of work is adequate to keep them fully utilised. They should not remain idle. Before selecting any machine the possibility of its continuous use must be explored.

5) **Reduction of monotony:** Sometimes the office work is repetitive in nature. Therefore, it becomes monotonous. In such a case, office machines which reduce boredom should be introduced.

10.7 KINDS OF OFFICE MACHINES

A large variety of equipment and machines are used in modern offices for performing different operations. These may be broadly classified into three groups as follows:

1) **Copying and duplicating machines:** These machines help in getting multiple copies of a document. The common examples of such machines are typewriters, duplicators, addressing machines and photocopying machines. You should note that addressing machines have already been discussed in Unit 7.

2) **Accounting, tabulating and computing machines:** These machines are used for doing accounting work, and arranging and tabulating various kinds of data. They include calculators, adding and listing machines, billing machines, accounting machines, tabulating machines, cash register, electronic computer, etc.

3) **Communication machines:** Telephone, inter-communication system, telex and telefax are widely used by big offices for internal and external communication. The uses of telephones and intercom system have already been discussed in Unit 8.

In this unit, we shall describe the working and uses of various kinds of typewriters and duplicators. Operations and uses of calculators, tabulators, accounting machines, adding/listing machines, cash register, Telex and Fax will be discussed in Unit 11.

10.8 TYPEWRITERS

Typewriter is the most common machine used in almost all offices. A typewriter can produce written matter on a piece of paper in types similar to the printer's type. Typewritten letters are attractive in appearance as compared with the handwritten ones. The same matter can be typed in lesser space on writing paper along with carbon copies. It involves less time and labour of the typist. Thus, use of typewriter brings about speed and efficiency in office operation. Many other advantages such as quick tabulation, storage of data, typing of formulas, etc., may also be obtained by the use of special purpose typewriters. Moreover, typewriters are also used for cutting stencils used for getting a large number of copies with the help of duplicators.

There are a variety of typewriters available in the market. Each of them has some specific features and uses. The details of some commonly used typewriters are given below:

1) **Standard typewriter:** It is a manually operated machine of standard size and type faces. To meet the special requirements of the work, it may be modified in many ways e.g., changing the styling of the type or increasing the size of the carriage. Standard typewriters of various makes such as Remington, Facit, Godrej, etc., are available in the market. A standard typewriter can type ten characters to the inch horizontally and six lines to the inch vertically with single spacing. Moreover, a number of carbon copies can also be obtained depending upon the quality of typing and carbon papers used. Look at the typewriter shown in Figure 10.1.
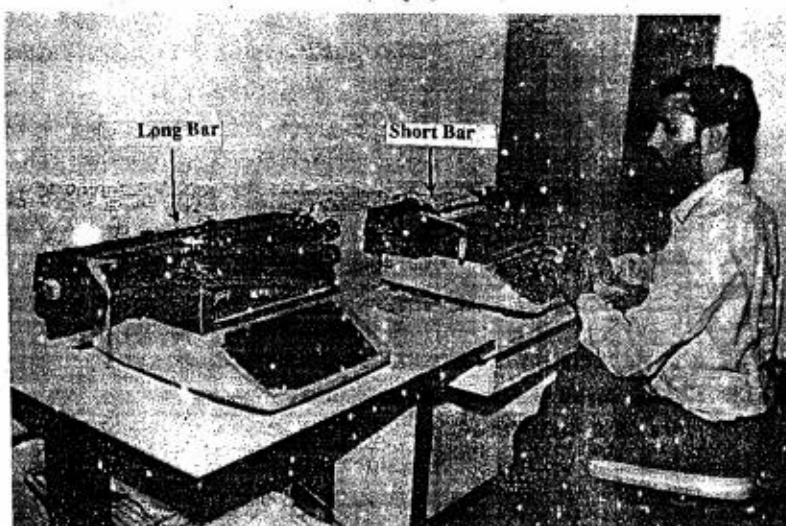
Figure 10.1: Standard Manual Typewriters

2) **Portable typewriter:** Portable typewriters practically have all the features of the standard typewriters. But the major difference is portability and compactness. As the portable typewriters are usually supplied in suitable carrying case, they are often the travelling companions of press reporters, businessmen, executives and private secretaries. Figure 10.2 presents the picture of a portable typewriter.

3) **Noiseless typewriters:** Noise is the common problem with the standard typewriters. Noiseless typewriters are much quieter than the standard typewriters. These utilise a special type bar to reduce the noise due to the impact of the type bar upon the paper. These noiseless typewriters are very useful when more typists work in the same room.

Manual

Electronic

Figure 10.2: Portable Typewriters

4) **Electric typewriters:** Electric typewriter is similar to standard typewriter but with an electronic motor taking the place of the human energy. An electric typewriter is much faster than the standard model. It can produce up to 20 copies depending upon the thickness of the paper used. The slightest touch of fingers sets the keys in motion and the impressions are unitorm and perfect. Electric typewriters are commonly preferred because of the fine ess of their print and the speed of typing and uniform quality of the print. Electric ypewriter is good for cutting stencils, typing invoices and preparing material for printing. It lessens the fatigue of typists and improves the quality of work. However, it is more expensive than the standard typewriter.

5) **Automatic typewriter:** It is a power-driven machine and opera es from a 'player piano' type roll which is cut on a standard typewriter. It automatically types a standard proforma from a previously punched or stencilled master. When the master is placed on the machine and the machine is switched on, the matter is automatically typed on the paper at a speed of about 150 words per minute. Non-standard information like names, addresses, etc., may be inserted at appropriate places by manual typing. Thus, it is suitable when letters or circulars bearing routine messages have to be reproduced in large numbers.

6) **Electronic typewriter:** Advancement in technology has led to the introduction of the electronic typewriter. It is based on the sophisticated microprocess technology. It has a 'memory' or 'electronic brain' which enables it to recall the whole document at a time and type it automatically at the press of a button. A small display panel reads out the memory and permits editing, and modification of drafts on the typewriter itself prior to final print-out. An electronic typewriter is shown in Figure 10.3.

Figure 10.3: Electronic Typewriter

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7) **Typewriters with special attachment:** Such typewriters facilitate typing work of a special nature by using various attachments. For typing continuous strips of office forms, a continuous stationery device car. be attached to a standard typewriter. Similarly, the front feed device enable the papers to be inserted into the machine from the front. Under this arrangement, cheques, receipts, etc., can be inserted into the typewriter from front and typed. The card holding attachment enables small stiff cards or lables to be fed into the machine and curved round the roller. Even carbon copies can be obtained by using carbon ribbon attachment on the standard typewriter.

10.9 DUPLICATING MACHINES

Offices frequently require multiple copies of various letters and documents. The simplest method is to make the copies at the same time along with the original letter or document. Carbons, carbon-coated sheets or carbonless copy papers are often used to get a small number of legible copies. A standard typewriter can produce up to six copies, whereas an electric typewriter can produce up to 20 copies as compared to four legible copies by handwriting. But where the number of copies required is more than 20, a duplicator may be used for the purpose.

Duplicating is a process whereby a master copy is prepared from which a large number of other copies are obtained with the help of a duplicating machine. It is a substitute for printing. It is used when the number of copies required is more than the capacity of a typewriter and yet not large enough to justify printing. Various makes of duplicating machines are available in the market which can produce 200 to 500 legible copies of letters, circulars, notices, reports, forms, price lists, etc. It may be noted that duplicating is different from photocopying; in the latter the master is not created, but copies are made from the original.

Different kinds of duplicators are available in the market. The more important among them are:

1) Stencil duplicator
2) Electronic stencil duplicator
3) Spirit duplicator
4) Offset litho machine
5) Typeset duplicator

Now let us briefly discuss the working and uses of these duplicating machines one after the other.

Stencil Duplicator

The stencil duplicator is commonly used in offices where a large number of notices, circulars, price lists etc., are to be reproduced quite often. Such duplicators can be manually-operated or power-driven. They are available in the market under different
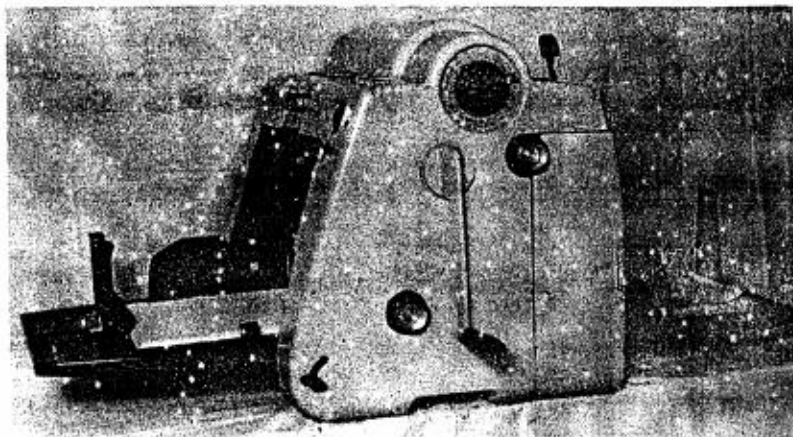

Figure 10.4: Stencil Duplicator

brand names (e.g. Shaurie Roneo, Gestetner, Kilburn). In the stencil method of duplication, you have to use a coated fibre sheet (stencil or waxed paper) which is typed or traced using a stylus with the matter to be duplicated. The stencil (master copy) is then put on the duplicating machine (also known as the mimeograph). The stencil gets ink through the cuts on it and imprints the material on the duplicating paper which comes in contact with the stencil automatically when the machine is operated by hand or by electricity. Figure 10.4 shows a stencil duplicator.

Advantages: Stencil duplication is very popular because of the following advantages:

1) This duplicating process is cheaper as compared to printing or other processes.

2) Graphs, diagrams, etc., can be prepared easily on the stencil by using a stylus pen.

3) Stencil can be altered easily by using correcting fluid.

4) A good number of copies can be obtained within a short period of time.

5) Photographic reproduction is possible with electronic stencils.

6) Stencils can be stored and used again for more copies when required.

Disadvantages: The disadvantages of stencil duplicators are as under:

1) The main disadvantage of stencil duplicating is that separate runs are required for two or more colours. However, complicated duplicators have been developed for impression in multiple colours simultaneously.

2) Stencil duplicating proves quite costly if only a few copies (say up to 25) are required.

Electronic Stencil Duplicator

Electronic stencil duplicators are machines with marked improvement over the ordinary stencil duplicators. Photographic copies (typed or cyclostyled or printed) can be obtained with an electronically produced stencil. It takes only a few minutes to produce a stencil. The stencil is made from the original without any photographic process. The original document which is to be reproduced is put around the roller and it is electronically scanned to get the exact contents of the document on a stencil. This stencil is used to get further copies.

Electronic stencil duplicator has all the advantages of an ordinary stencil duplicator. In addition, it has the advantages of speed and accuracy in reproduction. Moreover, from one stencil you can obtain up to 10,000 copies.

Spirit Duplicator

It is also known as **'hectograph'.** It uses a high class paper which is backed by hectographic carbon sheet as the reproducing medium. When the matter is written or typed on such a paper, a reverse image is obtained on the back of the master copy. Different coloured carbons may be used consecutively in the preparation of the master yielding a coloured reproduction in one operation. After the preparation of master, it is clipped at one end of the drum of the Galetine duplicator. The copy paper is then fed through the machine. The function of the machine is to damp the copy paper with the solvent in its passage through the machine so that it is moistened immediately before it comes into contact with the master on the drum.

Advantages: Advantages of spirit duplicators are as follows:

1) Both carbon and master paper are cheaply available.

2) Master copy can be prepared easily.

3) The process is simple.

4) Good quality paper is used for copies.

5) Many colours can be duplicated simultaneously.

Disadvantages: The disadvantages of spirit duplicating are as follows:

1) The copies are inferior in quality because the dye tends to spread and ink on the copies tends to fade with time.

2) The clarity of the image becomes progressively weaker as the copies are rolled out.

3) It is difficult to alter the master copy if there are mistakes in the master.

Offset Litho Machine

Offset lithography is not so much a duplicating process. Under this, masters are prepared on the metal sheets or specially surfaced paper. They may be typewritten, handwritten, or drawn by using a special ball pen, or produced by the electrostatic copying process. A greasy image is produced on the master, which is then fixed to the outside of a cylinder. The roller comes in contact with the inked cylinder and water, and the image is then offset on another roller (known as the rubber), where it becomes a negative impression. Paper is then fed between this blanket roller and the impression roller, to receive a positive imprint. Up to 50,000 copies can be obtained from a metal master and up to 5,000 copies from a paper master. The metal masters can be stored and revised also.

Advantages: The advantages of offset lithography are as under:
1) The process is well suited to the production of office forms, particularly those with complex rulings.
2) A very large number of copies can be obtained.
3) It is a cheap form of printing. Compared with normal printing, cost of printing is lower by 30% to 40% in offset litho printing.
4) The quality of production is much better as compared to stencil duplicators.
5) Master can be stored for an indefinite period. Copies can be obtained with the help of master whenever required.

Disadvantages: The disadvantages of offset printing are as follows:
1) Separate runs are required for printing in different colours.
2) It can be run only by trained operators.
3) It is costlier than other duplicating machines.
4) It requires sufficient office space for storing chemicals, plates, and paper, etc.

Typeset Duplicator

It is a small printing machine which employs letter press type. Individual types for each letter are set up round the outside drum and printing takes place usually by inked ribbon. The process of setting up the type is slow and it requires skill. Once the matter to be printed has been set up, long runs of high quality work are possible. This process is relatively expensive and setting the type up is rather slow and laborious. However, raised type printing is often of better quality than offset litho printing.

Typeset duplicator is not so pupular as the offset litho machine. It is relatively slow and laborious. It is expensive also. However, it is more suitable for printing cards.

10.10 PHOTOCOPYING MACHINES

Photocopying machines produce an exact photographic copy of the original. A variety of such machines which operate on photographic principle are available in the market. It takes only a few seconds to get a copy of the original with the help of such a machine. Thus, photographic copies of documents can be obtained quickly whenever required. Moreover, when a photographic copy is obtained, say of an invoice, it contains all the details such as the letter heading, the telephone number, the signature of the writer and all other information contained in the original. This eliminates the need for checking which is necessary in most other copying methods. Photocopying machine is shown in Figure 10.5.

Advantages: The advantages of photocopying process are as below:
(i) It is very fast as ccopy can be obtained in a few seconds. There is no wastage of

Figure Q.5: Photocopying Machine

2) It reproduces the original in its finest details. It gives an exact copy of the original.

3) It can reproduce copies of sketches, diagrams, graphs, pictures, etc., which may be otherwise difficult to reproduce in the ordinary course.

4) It avoids human errors. There is no need for checking the copy as photocopy is the exact replica of the original.

Disadvantages: Photocopying machines suffer from the following disadvantages:

1) Only a limited number of copies can be obtained. This process is very expensive if a large number of copies are to be obtained as it takes a long time. However, this method is economical where the number of copies required is small.

2) The paper used for photocopy is coated with chemical emulsion because of which a photocopy curls up instead of lying flat. Because of the chemical coating, paper is costly.

Methods of Photocopying

Reflex system: By this method, a negative copy is produced on photographic paper. After wet processing and drying, this is used in turn to produce one or more positive copies by further exposure and developing.

Diffusion transfer: Under this method, the first exposure is made on to a negative which is processed in the machine together with a sheet of a non light sensitive paper to produce an immediately readable copy. The negative can be used several times, and up to 15 copies can be produced from the same negative.

Dye-line (ozalid or diazo) or blue printing: This method requires a translucent sheet on which the original is transferred. The original is brought in contact with the special dye-line paper and then subjected to bright light. The positive copy is developed by soaking in three or four solutions and then dyring. This process is simple and quick. It does not require a camera to reproduce a copy. It is very useful, particularly, in preparing charts, buildi g plans and machine drawings. But only a few copies can be obtained by this method.

Electrostatic copying or xerography: Modern photocopying machines help in getting exact copies of the original at a very fast speed. These days electrostatic copying machine or Xerography has gained wide acceptance. The term 'xerography' means dry pictures. Thus, this process completely eliminates wetness. It is a process of electrical photography which uses ordinary paper and does not require any chemical treatment. Under this, the surface of coated plate is sensitised by an electrically charged grid which moves across it. The coating of the plate is then fully charged with electricity. The original document is projected on the coated plate through a lens system. Positive charges disappear in areas charged to light. A pattern of charges is left on the coated plate of exactly the same shape as the dark part of the original document. Afer this, a negatively charged ink powder is dusted over the

plate which adheres to the positively charged image. A sheet of paper is placed over the plate to receive a positive charge. The positively charged paper attracts powder from the plate forming a direct image. The print is made permanently by exposing to heat.

Modern Xerographic machines have been developed to a stage where all that is necessary to do is to set the dial on the machine for the number of copies required and push the print button. The copies are then printed automatically. Xerographic copying is preferred to other photocopying processes because of its speed and versatility. Copies of diagrams, illustrations, drawings, etc., can also be used for preparing matters for offset litho printing. However, only big offices can instal such equipment as it is very costly. Its repair and maintenance cost are also higher as compared to the duplicators.

Check Your Progress C

1) List the various kinds of typewriters used in offices.

....

....

2) Have you ever seen the portable typewriter? If yes, please state the basic difference between a portable typewriter and the standard typewriter.

....

....

3) What is the difference between photocopying and duplicating?

....

....

....

4) State whether the following statements are True or False.

   i) Typewritten letter is preferred to handwritten one because of good appearance and legibility.

   ii) Standard manual typewriter is costlier than electronic typewriter.

   iii) Stencils used in duplicators can be prepared with the aid of typewriters only.

   iv) Duplicating is economical if the number of copies required is less than 20.

   v) There is no need of checking xerox copies if the original is accurate.

10.11 LET US SUM UP

Office mechanisation refers to the process of introducing the use of machines and equipments in place of manual operation of office work wherever possible and useful.

The main objectives of office mechanisation are to: 1) increase efficiency of office work, 2) save labour time and clerical costs, 3) achieve accuracy and eliminate chances of error, 4) minimise chances of fraud, and 5) improve employee morale by reducing monotony.

The advantages of mechanisation of office work are as follows: 1) improved quality of work, 2) reduction in operating costs, 3) higher efficiency of performance, 4) greater accuracy of work, 5) standardisation of office routines and procedures, 6) better control and supervision by managers, and 7) reduction of monotony. Limitations of office mechanisation are: 1) heavy installation cost, 2) dislocation of work and cost of breakdown, 3) possibility of underutilisation, 4) inflexibility of office systems 5) cost of training operators, 6) employee resistance, 7) risk of obsolescence, and 8) other problems of space noise etc.

The decision to mechanise office work requires due consideration of a number of factors, such as its usefulness, time and cost saving potential, desired accuracy of work, adequacy of work, full utilisation of capacity, scope of reducing monotony, etc. Choice of the type and brand of machines should be made taking into account the following aspects: 1) durability, 2) adaptability for multiple use, 3) portability, 4) necessity of standardisation, 5) easy operation and training of operators, 6) availability of repairs and maintenance service.

Office machines and equipment may be broadly classified into three categories: 1) copying and duplicating machines, 2) accounting, tabulating and computing machines, and 3) communication machines. In this unit we have studied about the copying and duplicating machines only.

Typewriters are the most commonly used copying machines. They produce written matter on paper in type similar to the printer's type, along with carbon copies. There are different kinds of typewriters with different features. Some of the commonly used types are: 1) standard typewriter, 2) portable typewriter 3) noiseless typewriter, 4) electric typewriter, 5) automatic typewriter, 6) electronic typewriter, and 7) typewriter with special attachments.

Duplicating is a process whereby large number of copies can be obtained from a master copy with the help of a duplicating machine. Duplicating machine is used when the number of copies required is more than the capacity of a typewriter and yet not large enough to justify printing. Various makes of duplicating machines are available which can produce 200 to 500 legible copies from the same master copy. Some of the important kinds of duplicating machines used are: 1) stencil duplicator 2) electronic stencil duplicator, 3) spirit duplicator, 4) offset litho machine, and 5) typeset duplicator.

Photocopying machines, as distinguished from duplicating machines, produce exact photographic copy of the original document in a few seconds. The copy is an exact replica of the original. There are several methods of photocopying. They are: reflet system, diffusion transfer, blue printing and the modern method of electrostatic copying or xerography.

10.12 KEY WORDS

Duplicator: A duplicating machine which produces a number of copies from a master impression. It is used for turning out circulars, price lists/forms, reports, etc.

Electric Typewriter: Typewriter operated with the help of an electric motor and capabale of much faster typing than the manual typewriter. It also makes perfect impression uniformly.

Electronic Typewriter: Typewriter based on microprocessor technology. It is power-driven and has an electronic brain which enables it to remember the document. A small display panel reads out the memory and permits editing and alteration of stored information.

Office Mechanisation: Refers to the process by which machines and equipment are introduced with a view to speeding up office operation.

Photocopier or Electrostat Machine: A machine which uses ordinary papers for producing exact replica of the original documents through the process of electrical photography.

Portable Typewriter: Compact and light-weight typewriter of smaller size. They are ideal for personal use by sales representatives, journalists and executives who often so on tours.

Stencil Duplicator: Duplicating machine used for reproducing the exact copies of written work as well as maps, charts, etc., with the help of a coated fibre sheet (stencil or waxed paper) which has been typed or traced with the matter to be duplicated.

Typewriter: Typewriters with a standard keyboard and type which may be manually operated or power-driven and may be modified to meet special requirements.

10.13 ANSWERS TO CHECK YOUR PROGRESS

A 3) i) False   ii) False   iii) True   iv) True   v) True
B 2) i) True   ii) False   iii) True   iv) True
C 4) i) True   ii) False   iii) False   iv) False   v) True

10.14 TERMINAL QUESTIONS

1) 'The trend among business enterprises is to mechanise their offices.' Comment.

2) What factors will you consider while introducing time and labour saving office devices? Discuss.

3) Briefly discuss the factors to be considered while deciding on office mechanisation.

4) Name the important labour saving devices used by business houses and give a short description of any two of them.

5) "One of the common faults of office management is unwanted mechanisation." Discuss.

6) As the office manager of a company, you are required to purchase some equipment and appliances for the office. What factors should you take into consideration while making the selection of a brand for purchase?

7) Comment on the desirability of using labour saving devices. Point out and explain the principles governing the introduction of office machines and equipments.

8) Discuss the relative merits and demerits of mechanisation of an office.

9) What are the objectives of mechanisation in the office? How would you determine whether a particular machine is needed in the office or not?

10) Discuss the utility of typewriters to a business office. Briefly explain the various kinds of typewriters available in the office.

11) Suppose you are appointed as office manager, will you recommend mechanisation of the office? Why?

12) "Machines and equipments are introduced in the office just to give it a modern look." Do you agree? Give reasons.

Note : These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the university for assessment These are for your practice only.

UNIT 11 OFFICE EQUIPMENT AND MACHINES-II

Structure

11.0 OBJECTIVES

After studying this unit, you should be able to:

- enumerate different kinds of calculators and explain their uses

- describe the features of adding and listing machines

- state the uses of billing, accounting and tabulating machines

- define an electronic computer

- explain the working and uses of telex.

11.1 INTRODUCTION

In unit 10 you have studied that the office machines can be categorised into three broad groups: 1) copying and duplicating machines, 2) accounting, tabulating and computing machines, and 3) communication machines. You are already familiar with the first category of office machines in Unit 10. In this unit we will discuss the working and uses of various office machines coming under the remaining two categories. Particularly we discuss about calculating machines, adding machines, billing machines, accounting machines, tabulating machines, computers, cash registers, telex and telefax.

11.2 CALCULATING MACHINES

Calculating machines contribute greatly to efficiency by eliminating routine and repetitive arithmetical calculations. They perform all basic arithmetical oprations like addition, subtraction, multiplication and division. Calculations involving integers or decimal fractions of various units of measurment can be made accurately with these machines. Calulating machines can compute percentages, squares, square roots, logarithms, etc. They are particularly suited to calculate rates and amounts of interest, discount, commission, etc. Most standard calculating machines are

nonlisting, have a full keyboard and show the results on a dial. The sizes of machines range from the small pocket calculator to the big desk calculator. Look at the calculators shown in Figure 11.1.
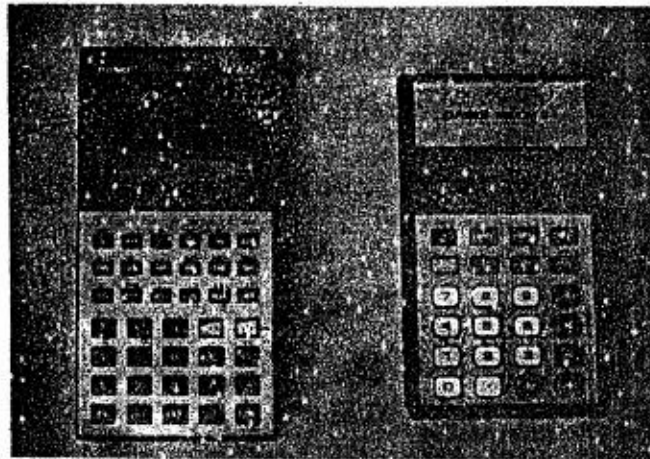
Figure 11.1: Electronic Calculators

The calculating machines may be used for the following purposes:

1) Interest calculation

2) Discount and commission calculation

3) Invoicing

4) Inventory checking

5) Freight bill preparation

6) Costing of products

7) Payroll alculations

The main advantages of various calculating machines are their long life, dependability, simplicity of operation and portability. The ease with which they can be moved from one desk to another enhances their utility in office considerably. Such machines bring about efficiency in operations and reduce the monotony in repetitive work. It should be noted that some of the calculating machines are very costly. The choice of any machine for office use will depend upon the types of calculations to be done, speed required, volume and frequency of calculations, degree of accuracy required, etc.

Types of Calculators

Several types of calculating machines are available in the market. Let us discuss about some of them.

1) **Key-driven Calculator**: It has a full-bank keyboard. When keys are pressed, the numbers are shown on the dial. Multiplications are made by repeated additions and similarly divisions are made by repeated subtractions. For instance, to multiply 3 by 3 is pressed three times.

2) **Rotary Calculator**: This machine may be operated manually or electrically. It requires the number to be entered on the keyboard by pressing the key and operating the lever to record the number on the dial. The results are obtained by turning the respective crank-handle clockwise for addition or multiplication, and anti-clockwise for subtraction or division.

3) **Electronic Calculator**: It is a miniature desk-size computer operated electronically with the aid of valves or transistors. It operates at a very fast speed and does not make any noise. An electronic calculator can be operated by electricity or battery and it may be a full-bank or ten-key type. It displays the figures of the calculations on a small screen which is activated by a cathode-ray tube similar to that used in a TV set.

5) **Printing Calculator:** It looks like an adding/listing machine and may have a full-bank keyboard or ten-key board. It is very easy to operate. The keys are pressed to register the figures for calculation. Then the symbol key (for multiplication, addition, etc.) is pressed and the answer is obtained by a pressing device which stores the desired figures until required, and then it can be added or subtracted. Transfers can also be made to the memory register and vice versa.

11.3 ADDING MACHINES

Preparation of invoices, payrolls, etc., involves a lot of calculation work and adding **is a basic** operation in most of such work. Operations involving simple additions may be done by the adding machine which may be operated manually or electrically.

Various kinds of adding machines include (1) full-bank machines used for adding ledger balances, checking invoices, etc., (2) ten-key adding machines used mainly for addition, though other calculations can also be done, and (3) key driven calculators used for addition, multiplication, subtraction and division, which may be electrically or maoually operated.

Adding machines may be either listing or nonlisting machines. The listing machines enable the preparation of a printed record of the items added and the total along with the operation. For instance, it is quite useful to have a list of cheques received by post and the total amount th reof. This record is on a strip of paper roll called the tally roll which also serves as a record of operations for visual comparison. Many such machines are capable of subtraction also. Nonlisting machines, on the other hand, do not print the items fed into it or their total. The results or totals are read from the dials. Since all additions do not require printed list, nonlisting machine may serve the purpose equally well. Look at the adding machine shown in Figure 11.2.
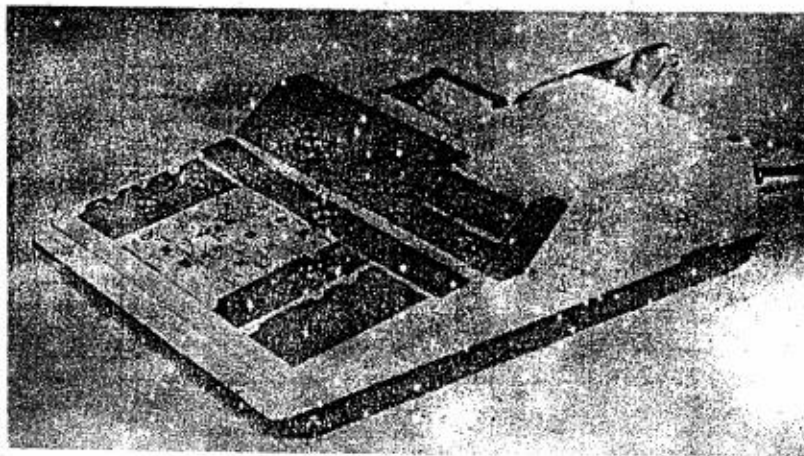
Figure 11.2: Adding Machines

Adding machines are normally used for clerical operations requiring addition and subtraction. These operations include:

1) Pre-listing of invoices

2) Preparation of trial balance

3) Listing of cheques

4) **Preparation of payrolls**

5) **Preparation of income tax statement**

6) Checking of customers account

The adding listing machine offers several advantages. It gives a printed records of amount fed into the machine, Figures in the machine can be compared easily with book figures. The operation is very simple and avoids chances of mistake. It can be used for checking additions done byclerks in the ledgers or payrolls.

11.4 BILLING MACHINES

Billing machines are used for typing orders, invoices, bills of lading, cash memo for goods sold, and so on. It is generally a combination of a typewriter and a calculator The machine does all calculations of discount, commission additions, subtractions, totals, etc. These machines are worth installing only if the volume of work is large.

11.5 ACCOUNTING MACHINES

Accounting and book-keeping machines may well be compared with typewriters used on a flat bed. These machines are used for the purposes of: 1) posting in journals, cash books, ledgers, etc., 2) preparation of cheques, payrolls, cash received and payment sheets, 3) preparation of copies of ledger accounts along with posting, and 4) calculating and computing figures and drawing ledger or cash book balances, etc.

The advantages of accounting machines are as follows:

1) They save labour and time in posting entries in the books of account.

2) Accuracy is ensured.

3) The books of accounts can be balanced promptly and accounts can be kept up to date.

4) They provide useful data to the management for purposes of control.

The accounting machines are very expensive and may be useful only to large concerns where the volume of work is large and cannot be done efficiently by office assistants. Moreover, skilled operators are required to run such machines.

11.6 TABULATING MACHINES

These machines combine two processes: 1) sorting information into classes, and 2) adding up the totals for each class. For tabulating statistical information by this machine, the cards are punched with the help of punch-card machines and then sorted. Then the tabulation is done and printed on paper in columns and rows. In an office, if a large amount of information is to be handled daily, automatic tabulating and sorting machines can be adopted.

11.7 ELECTRONIC COMPUTER

In big organisations, a large volume of data is generated every day. This data cannot be used in its raw form. It must be processed and presented in suitable form to enable management to take important business decisions and to perform other functions. The data may be transferred into tables or reports. The transformation of raw data into a meaningful form is known as **data processing**. When data processing is done by electronic machine, it is known as **electronic data processing**. Electronic computers are now widely used in offices for data processing.

An electronic computer is a general, purpose machine capable of performing various operations at high speed. It is an electronic device by which data is processed and printed. It can high whole systems of operations and change automatically from one operation to another in a desired sequence. As a matter of fact, computer is a replica of human brain. it can perform several function such as arithmetical operations, storage of information, arranging and tabulating data, analysis of data, etc.

As you know, computers have been in use in educational and research institutions, railways, airlines, industrial enterprises and other big organisations. The uses and advantages of computers shall be discussed in greater detail in Unit 13

Cash registers are used by big retail stores to record payments received from different customers against daily cash sales. Cash registers simultaneously record cash transactions on a tape, produce printed slips and operate cash drawer. They also keep running totals of the transactions as they take place. Some models can prepare receipts to be issued to the customers while others can simply add the amount and show the total on the meter. Look at Figure 11.3 which presents the cash register.

Figure 11.3: Cash Register

Retail stores and railway booking agencies use **coin handling machines** which record, sort out, store and return coins of different denominations to customers. Coin handling machines return the correct amount to the customers and all cash receipts are recorded by the cash register. The machine record is kept under lock and key. It forms a complete unalterable record of cash sales. It is a key set and electrically operated machine. Cash registers are normally used by the following organisations:

1) Departmental stores

2) Super bazars

3) Hotels and restaurants

4) Hospitals

5) Electricity supply undertakings

Check Your Progress A

1) Give any five uses of calculating machines.

....
....
....

2) Have you ever seen a cash register? If so, please state the name of the organisation.

....

3) Which of the following statements are True and which are Flase?
    i) Cash registers are used in retail stores.
    ii) Calculators are used for calculating interest, discount, commission, etc.
    iii) Accounting machines are meant for recording cash transactions only.
    iv) Adding/listing machine provides a record of the items.
    v) Pocket calculators and desk calculators serve the same purpose.

11.9 COMMUNICATION MACHINES

As you know, communication is one of the important functions in any office. Communication is the process of conveying information from one person to another. It can be written or oral. Written communication may take place in the form of letters, memoranda, reports, orders, invoices, circulars, catalogues, etc. These written messages may be delivered personally (or through a messenger) or through certain mechanical devices like telex, teletex, facsimile, etc. Similarly oral communication can take place face-to-face or through some mechanical devices such as telephone, dictaphone, etc. Now let us discuss the major mechanical devices used in office communication.

11.9.1 Dictaphone

Dictating machines are used for dictating replies to correspondence or any other matter to be recorded. It works on the same principles as those of a gramophone. The office, intending to dictate a letter, a message or document will speak through a mouthpiece. His words are recorded on a revolving wax cylinder. At present magnetic tapes, plastic discs or plastic belts are also used for recording words. Look at the dictaphone shown in Figure 11.4.
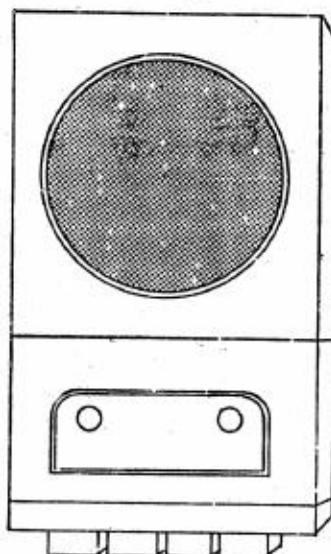
Figure 11.4: Diagramatic Presentation of Dictaphone

When the typist wants to type the contents of the dictation, he places the cylinder or tape on the transcribing machine and with the help of ear phones can listen to the dictation at convenient speed. He can replay the machine if he wants to hear the words again and again. Once the matter is typed, the words can be erased, with the help of another device called SHAVER.

Advantages of dictating machines are as follows:

1) The dictating officer can dictate letters at his convenience and the typist can type them at his convenience. The stenographer need not report to the officer every time there is a dictation.

2) Knowledge of shorthand is not necessary on the part of the typist.

3) Even telephone messages can be recorded by special devices. The recorded tape can be sent anywhere by post.

Its only disadvantage is that personal contact between the officer and the typist will be lost when the dictaphone is used.

11.9.2 Telephone

Every modern office uses a telephone. It helps us to speak personally with people who are away from us at a distance. On a telephone a business executive can get in touch with people anywhere in the world.

A telephone is a ready means of communication when urgent decisions have to be taken. It replaces the paper correspondence which takes time. It is however necessary that all important matters discussed on telephone are confirmed by letters. In big offices a separate telephone reception room is arranged. The person in-charge of such a room will be directing the incoming messages to the right person by connecting him to the central system. Similarly he will also be routing the out-going messages.

Some offices instal internal telephone systems. This helps one executive to speak with another, of a different department. Figure 11.5 shows the boss speaking to his subordinate over internal telephone system.
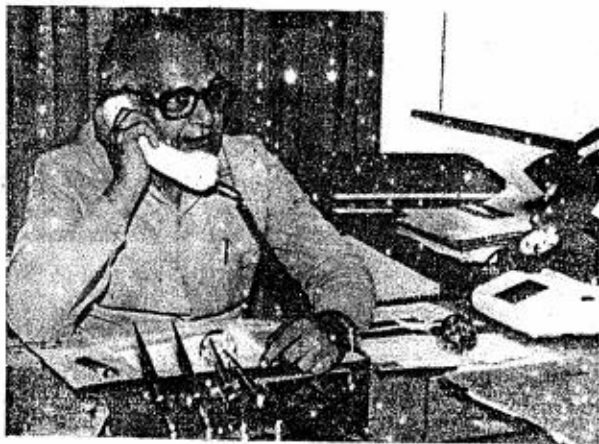
Figure 11.5: Instructing Subordinate
Over Internal Telephone

11.9.3 Telex and Teletex

Telex: It is one of the most established means of communicating textual information within the country and across the countries. The traditional telex terminal has a typewriter style keyboard and punches images on the paper tapes. The message is checked, adjusted (if required) and transmitted by feeding the paper tape into a paper tape reader and sending the message over the telex lines. When it reaches the destination, the receiving terminal sends a code at the sending end to verify that it has arrived at the correct place and received. Telex operates at very low speed of 50 bits per second (approximately 66 words per minute). Further it uses a 5-bit internal code to represent symbols and hence a very limited character set is available viz. upper case letters, numbers, space and 13 special characters. Moreover, failure rate on connections is relatively high in telex service making it less reliable. While telex can be considered as an elementary form of electronic mailing, it is not a true document distribution equipment since it cannot handle graphics and pictures as the character set is very limited. Figure 11.6 shows the telex machine.
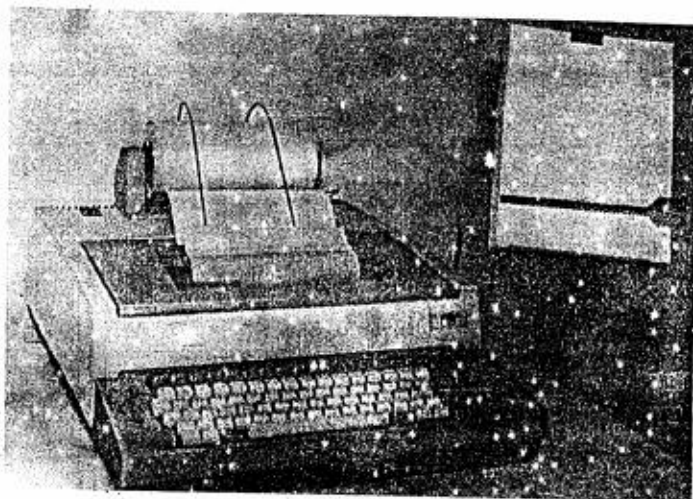
Figure 11.6: Telex Machine

Teletex: It is a high speed desk to desk message service which became popular in advanced countries. This service allows users to type and edit letters and transmit them over telephone line to their destination. The service permits the setting up, sending and receiving of calls automatically with facilities for storage of incoming and outgoing messages. Teletex offers a much higher transmission rate at 2.4 K bits per second which is equivalent to transmitting a typical A4 page in less than 10 seconds Another major difference in teletex is the use of 8-bit character code permitting up to 256 characters to be sent across. This service is yet to become popular in our country. The following table compares telex and teletex services:

Table 11.1 : Difference between Telex and Teletex

	Telex	Teletex
Medium	Dedicated low grade network	Network independent (can use any available communication and network facilities using appropriate interfaces)
Rate of Transmission	50 bits/second	1200-2400 bits/second
Character code and set	5 bit code (about 50 different characters)	8 bit code (over 200 characters)

11.9.4 Facsimile (Fax)

Facsimile (or FAX) has established itself as an effective means of rapid transmission of images such as pictures and drawings. Fax involves scanning of graphic information, converting it into signal waves and then taking these signals to the destination and produce a copy of the image at the destination. The signal waves are transmitted in any of the communication media like telephone lines, radio, satellites, etc.

Till recently Fax has been considered a specialist service used primarily in newspaper industry to transmit composed pages between locations. Availability of desk top inexpensive Fax machines during the last few years has totally revolutionised office communication scene. Today it is possible to send any document like letters, agreements, invoices, purchase orders, etc. rapidly and economically to anybody in the world instantly. The capability of processing image and pictures provides a new dimension to the applications to which this technology can be put to use.

Modern fax machines provide several additional facilities some of which are listed below:

1) Resolution and speed selection to improve quality of message reproduction
2) Paper size selection
3) Automatic dialling and answering
4) Automatic document feed
5) Encryption facility to allow the **transmission** to be encrypted (deciphered or encoded) for security purposes
6) Some Fax machines can be used as photocopiers
7) Fax machine can transmit and receive simultaneously
8) Time and date stamp for accounting
9) Jumping over white space to reduce the time of Fax operation

We notice that Fax machines are becoming popular in our country on account of availability of reliable equipment at affordable prices and also significant improvements in the communication facilities available today. Fax machine operates using normal telephone lines, and improvements in STD (Subscriber Trunk Dialling) and ISTD (International Subscriber Trunk Dialling) services permit very convenient and reliable transmission across cities and different countries. In many situations, these are expected to replace telex services gradually. Look at Figure 11.7 which present the facsimile machine.
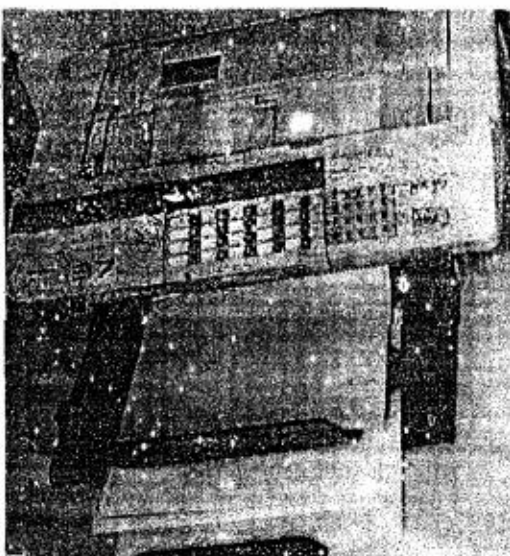
Figure 11.7: Fax Machine

The merits of fax service are as under:

1) All types of drawings, documents, etc., which may be handwritten, typed or printed may be transmitted through the telefax system.
2) Transmission over long distances is possible.
3) The copy produced by the telefax receiving machine may be used immediately.

11.10 OFFICE OF THE FUTURE

Over the years information technology has advanced at a relentless pace. This brought about a sweeping change in the office environment. The offices in the near future will be linked with the rest of the world via a modern link plugged into the telecommunication network. Furthermore the most recent trend points toward the 'mobile office' which will be portable and battery-operated. The mobile office will run from a van equipped with telephones, hand free intercoms, a mobile fax machine, a remote control television, a video-recorder and so on. It is also expected that a new generation of portable computers, printers and copies will further revolutionise the office operations. There will be frequent use of electronic computers to collect, arrange and process data. Computers will also help application of quantitative technique to resolve management problems.

Check Your Progress B
1) Name three organisations you know which use telex service.

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....

2) List three advantages of telefax service.

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....
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3) How dictaphone is different from telephone in terms of usage in the office?

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....

4) State whether the following statements are True or False.

   i) The stock brokers make use of telex service.

   ii) It is possible to use teleprinter for internal communication.

   iii) It is necessary to instal teleprinters at both ends to transmit telex message.

   iv) Diagrams can be transmitted through the telex service.

   v) Picture can be transmitted through telex.

11.11 LET US SUM UP

Besides copying machines (typewriters) and duplicating machines, there are several other types of machines used in modern offices. Calculating machines perform all basic arithmetical calculations involving integers, decimal fractions and various units of measurement. They are particularly useful in calculating rates, amounts of interest, discount, commission, etc., invoicing, inventory checking, freight billing, costing and payroll calculations.

Adding machines are used for operations involving simple additions. These may be manually or electrically operated. Such machines may be listing or nonlisting type. The billing machine combines a typewriter and a calculator. It may be used for typing orders, preparing invoices, bills of lading, cash memo, etc.

Accounting and book-keeping machines are like typewriters on flat bed. These machines can be used for various purposes like postings in the books of accounts, preparing payroll, cheques, copies of ledger accounts, drawing account balances, etc. Tabulating machines are used for classifying, sorting tabulating and printing statistical information in columns and rows.

Electronic computer is a general purpose machine which can perform a variety of functions including mathematical operations, storage of information, arranging and tabulating data, and analysis of data. Cash Registers simultaneously record cash transactions on a tape, produce printed slips, keep running total of dealings and operate cash drawer. Besides recording cash receipts, coin-handling machines sort out, store and return coins of different denominations to customers.

Teleprinters are machines used for direct transmission of written messages from one place to another. Telex and facsimile (or FAX) systems of communication are useful devices for transmitting messages instantaneously to distant places. Fax is used to transmit the exact replica of drawings, sketches, diagrams, formulae, etc., which are drawn on electro-sensitive papers and inserted into the facsimile machine. The modern trend points towards the 'mobile office' which will be portable and battery-operated and fitted with telephone hand-operated intercoms, a mobile fax machine, a remote control television, a video-recorder, and so on.

11.12 KEY WORDS

Accounting Machine: A machine used for repetitive accounting jobs in the office. It is specially designed for posting of ledgers, preparing payrolls, costing abstracts, invoices, etc.

Adding Machines: Machines used for quick totalling of a number of amounts.

Billing Machine: A machine which is a combination of a roller type typewriter and a calculator. It can be used for preparing invoices, bills, cash memos, etc.

Calculating Machines: A machine used for operations such as subtracting, multiplying, dividing, percentage, etc.

Cash Register: A machine used to maintain accounts of cash sales.

Electronic Computer: A replica of human brain. It can perform complex mathematical operations at a very fast speed and has memory to store data.

Facsimile. Also called fax or telefax, telegraphy, is an improvement over telex. It assists in transmitting drawings, sketches, diagrams, formulas, etc., over the teleprinter.

Telex: It makes use of teleprinters at the points of transmitting and receiving the message.

11.13 ANSWERS TO CHECK YOUR PROGRESS

A 2) i) True   ii) True   iii) False   iv) True   v) True

B 4) i) True   ii) True   iii) True   iv) False   v) False

11.14 TERMINAL QUESTIONS

1) Explain the working and uses of calculating machines in modern offices.

2) Discuss the various types of calculating machines used by modern organisations for the computation work. What are their common advantages?

3) Enumerate the broad features of adding machines. Discuss the utility of these machines.

4) What is a cash register? Which type of organisations can use this machine for effective recording of cash receipts?

5) Write brief notes on the following:

   i)   Billing machine
   ii) Accounting machine
   iii) Electronic computer
   iv) Cash register

6) What do you understand by telex? How do businessmen make use of this service?

7) Explain the working of telefax. What are its merits?

8) Explain various machines used for communication in the offices.

> Note : These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the university for assessment. These are for your practice only.

UNIT 12 DATA PROCESSING

Structure

12.0 OBJECTIVES

After studying this unit, you should be able to:

- state the nature and importance of data and information in modern organisations

- distinguish between data and information

- explain the meaning of data life-cycle

- identify different methods of data collection and data processing to produce information

- recognise what determines the value of information

- describe the methods of presentation of data.

12.1 INTRODUCTION

Since the beginning of civilisation, people have required information to aid them in making personal decisions as well as in managing organisations. Recording information became necessary in course of time with the growth of social activities and organisations. Historians have traced some type of record keeping and data processing back to about 3500 B.C., when merchants in Babylonia were known to have kept records on clay tablets. At about the same time, the ancient Egyptians made a great improvement in record keeping when they started using papyrus (the forerunner of paper) and a sharp pointed pen called 'Calmus'. Today organisations of all types keep records and process data, but the technology of data processing has had a quantum leap forward especially during the last two decades. The world has gone through the agricultural revolution, industrial revolution and now is in the midst of what may be called information revolution.

In this unit, we shall discuss the nature and importance of data and information in a modern organisation, necessity of data processing, types and sources of data and methods of data presentation.

12.2 MEANING OF DATA AND INFORMATION

The terms 'data' and 'information' are often used in the same sense. However, there is a difference which must be noted so as to appreciate the significance of data and information.

12.2.1 What is Data?

In short, the term **data'** may be defined as a collection of facts and figures or a set of numbers. For instance, data may consist of figures of income and expenses recorded in the books of accounts, or quantities of goods sold contained in the invoices, or amount of wages and salaries paid to employees contained in the monthly payroll, and so on. Data may also consist of estimated demand for a product in different regions determined on the basis of market survey, or estimated exports and imports of commodities, or targets of imports and exports to be achieved during the five year plan period. These and various other types of data may be of interest to business enterprises for various purposes.

12.2.2 What is Information?

The mass of data in its raw form may not be useful as such. But to be useful in a particular context, the relevant data must be put across in a meaningful form. This may involve certain calculations, classifications of items, tabulation and presentation of figures in a form useful for the purpose in view. Conversion of raw data to make it informative in a specific context is known as **data processing**. When facts and figures have been processed they become information, and can be used as a basis for decision-making or action. **Information may, therefore, be regarded as the result of data processing.** Information is derived through the processing of data, i.e., conversion of data into meaningful form. For example, sales invoices put together in a file may contain data relating to goods sold during a period. But these figures will not serve as information to the sales manager until the sales figures have been added upon monthly or weekly basis and put up to him in the form of a proper statement.

Information is the processed data or meaningful data. It becomes information only to the extent it is useful and adds to the knowledge of the recipient. The same information may be useful in varying degree to different persons depending on the nature of their respective needs. Information relating to manufacturing costs will surely be more useful to the production manager than to the personnel manager. Again, a set of figures after processing may become useful information in one situation, but it may still be regarded as data if it needs further processing to serve as information for someone else. **Thus, what is information in one case may be data in another.** For example, data from sales invoices added up and presented as a monthly sales statement is information to the sales manager. But the same information has to be processed further showing, region-wise monthly sales, so as to be useful as information for sales supervisors in different market regions.

12.2.3 Distinction between Data and Information

We have discussed the meanings of data and information in detail separately. Many people quite often use these terms synonymously. Now let us study the difference between these two terms.

As you know, data refers to a set of isolated raw facts, figures and statistics which are unrelated and uninterpreted. Thus, data is defined as a collection of numbers,
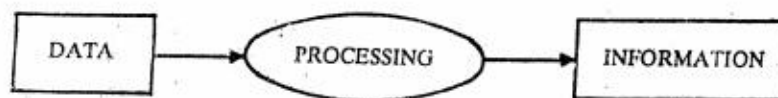
DATA → PROCESSING → INFORMATION

Figure 12.1: Conversion of Data into Information.

letters or symbols that can be processed, maintained or produced. Data may not be organised, may not add to our knowledge and may not surprise us. Organisational activities like sales, production, billing, collecting amounts due, etc., are examples of activities for which data can be available. Data have value only if they are useful in the performance of organisational activities. A bunch of cards relating to sales invoices, by itself, may have little use to the concerned staff. However, many reports can be prepared using the various data processing systems and made avai.aole to the concerned staff.

As stated earlier, information is the result or product of processing data, as shown in Figure 12.1.

Information provides knowledge. It contains an element of surprise, reduces uncertainty and triggers off action. Information may convey an occurrence or a set of occurrences which carry messages which, when perceived by the recipients through any of the senses, increases their state of knowledge.

Data becomes information when it is processed and placed in some context. In fact, the relation of data to information is that of raw material to finished product. Information for one person may be the raw material for another. Information is now considered a resource which supplements the existing resource by introducing messages and causing action.

Realistically, information communicates the state of a situation, but the perception can differ significantly between users. Information containing the same message in content and quantity communicated in the same way and at the same time, does not mean that it will be used similarly by all the receivers. Usage of information for various receivers would depend largely upon the perception, background and prejudice of the users.

Information is information only to the extent it serves the needs of the manager. It is significant for a manager only if it can add to his knowledge in planning the operations and help him in discharging his managerial responsibility. Only properly organised data enable managers to react to the same otherwise data becomes useless.

Check Your Progress A

1) What is data?

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2) What is information?

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3) Distinguish between data and information.

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4) State whether the following may be called data or information from the viewpoint of the manager of a company.

   i)   Profit and Loss statement for the year.

   ii) Salary statements of each employee presented in one file.

   iii) Statewise details of targets and sales of the company product.

   iv) Statement showing the cost per unit for the products produced by the company.

   v)   List of employees of the company.

12.3 IMPORTANCE OF DATA AND INFORMATION

Information is now regarded as one of the basic components of managerial decision making. It is as valuable as the human, material and financial resources. That is mainly because without information the firm cannot ensure proper use of the other tangible resources. The growth in size and increasing complexity of business enterprises has made it difficult for any one individual to manage various activities without necessary data and information. Efficient management always depends on the use of reliable data and information for planning, coordination and control. For decision-making and problem-solving, necessary data and information must be made available to managers at all levels of the organisation. Modern enterprises involve huge investment of capital, which includes capital contributed by owners as well as borrowed funds. Hence, owners and investors also need information about the performance and progress of the firm and its financial position at periodic intervals.

Executives of not only business enterprises but also other organisations such as government departments, municipal corporations, educational institutions, etc., require correct information to make correct decisions with regard to planning, coordination and controlling various activities. Their success depends largely on the adequacy of information on which the decisions are based.

The importance of data and information has grown rapidly in recent years due to the application of scientific methods in the management of organisations. Indeed management today is no longer based on rule of thumb or intuition. It involves use of scientific techniques for which availability of data is a must. Arising out of the increasing use of quantitative techniques in management, there has been a corresponding development in the methods of recording, processing and storage of data with the help of electronic devices like computers. Thus, it is possible now to handle massive data and information within a short time. One of the major functions of the office manager today is to continuously supply information required by executives as well as public.

12.4 CLASSIFICATION OF DATA

Data represent events and occurrences of various kinds. Data generated by business firms and available to business firms from various sources may be broadly classified as follows:

1) **Classification based on the nature of the data**
   i)   Financial data
   ii) Nonfinancial data

2) **Classification based on the sources of the data**
   i)   Internal data
   ii) External data

3) **Classification based on the origin of the data**
   i)   Primary data
   ii) Secondary data

Let us study these classifications in detail.

Financial Data and Nonfinancial Data

Financial data consist pf figures expressed in monetary units, such as rupees, dollars pound sterling, etc. Figures of income and expenditure, captal invested, value of opening and closing stocks, annual financial statements (Profit & Loss Account and Balance Sheet) include the figures in summarised form. Financial data relating to the national economy, like gross domestic product, per capital income. value of imports and exports, loans and advances made by financial institutions, capital issues by companies, etc., are published periodically by government departments and other organisations.

Nonfinancial data refers to facts and figures expressed in other than monetary units. Such data may be subdivided into two types as a) quantitative data, and b) non-quantitative data.

Quantitative data include facts and figures expressed in numbers or other standard units of measurement of units or by weight (e.g. tonnes of cement, barrels of oil, bales of cotton, and the like) are some examples of quantitative data. Similarly, number of workers employed, number employed on daily wages, etc.. are personnel data expressed in numbers. Facts are sometimes recorded in the form of opinions or preferences expressed by people, or ranks or grades assigned to different objects. These are generally referred to as **nonquantitative data.** For instance, data may be generated through market survey representing consumer preferences of different brands of a product, or opinions may be sought from customers regarding relative importance of different features of a particular product. Similarly, opinions about effectiveness of advertisements through different media may be expressed by persons as—'very effective', 'moderately effective', ineffective', and so on.

Internal Data and External Data

On the basis of sources of data, distinction may be made between 1) internal data, and 2) external data. Facts and figures which are available as a result of activities within an organisation are referred to as **internal data.** Such data may be collected from the books of accounts, payroll, personnel records, inventory records, files and documents of the organisation or the results of experiments and tests of product quality.

External data consist of data obtained from sources outside the organisation. Such data may by available from the records and reports of the Company Law Board, Reserve Bank of India, industry and trade associations, private institutions, Union and State Governments, United Nations and other International organisations, professional journals and periodicals, etc.

Primary Data and Secondary Data

The data which is collected for the first time for your own use is known as **primary data.** The source happens to be primary if the data is collected for the first time by you as original data. On the other hand, if you are using data which has been collected, classified and analysed by someone else, then such data is known as **secondary data.** For instance, national income data collected by the Government in a country is primary data for that Government. But the same data becomes secondary for those who use it later. We may thus, state that primary data is in the shape of raw materials to which statistical methods are applied for analysis. At the same time secondary data is in the shape of finished products since it has already been treated in some form or the other by statistical methods.

In case you have decided to collect primary data, you have to identify the sources from which you can collect that data. If you have decided to use secondary data, it is necessary for you to edit and scrutinise such data. Otherwise it may not have the desired level of accuracy or it may not be suitable or adequate for your purpose. If you do not edit and scrutinise the secondary data before you use it, the results of your investigation may not be fully correct. Therefore, secondary data should always be used with great caution. Bowley writes **"it is never to take published statistics at their face value without knowing their meaning and limitations."**

12.5 CLASSIFICATION OF INFORMATION

Information generated and used in an organisation may be classified into five groups as follows.

1) **Action versus nonaction information:** Nonaction information is synonymous with data. It does not indicate or provide the basis of any action. Information on the basis of which its recipient is expected to do something is known as action information.

2) **Recurring versus nonrecurring information:** Recurring information consists of information generated at regular intervals such as periodic factual reports. Nonrecurring information is typified by a report on studies to facilitate management decision making. This is of a non-repetitive type.

3) **Documentary versus nondocumentary information:** Documentary information refers to information which is preserved in some written form, or available on microfilms, punch cards, magnetic tapes, floppy disks, accounting reports, etc. Information which is transmitted orally based on individual observation is known as nondocumentary information.

4) **Internal versus external information:** All information generated within an organisation and directly arising out of the activities of the organisation and its dealings with other entities constitutes internal information. External information consists of all information originating outside the organisation and relating to its external environment.

5) **Historical information versus future projections:** Information relating to past events or activities is known as historical information. Information based on forecasts or projections and relating to the future are known as projected information.

Check Your Progress B

1) Distinguish between primary data and secondary data.

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....
....

2) Distinguish between quantitative data and non-quantitative data.

....
....
....

3) Give one illustration for each of the following.

   i)   Action information

   ....

   ii) Non-action information

   ....

   iii) Recurring information

   ....

   iv) Nonrecurring information

   ....

4) State whether the following statements are True or False.

   i)   In the modern large-scale enterprises decisions are taken by the manager on intuition.

   ii) In a business enterprise decisions are always taken based on financial data.

   iii) Facts and figures based on the activities within the organisation are called internal data.

   iv) Primary data is always collected firm internal sources.

   v)   Information available in the balance sheet of the company may be called nondocumentary information.

12.6 DATA LIFE-CYCLE

We can think of data having their own life-cycle, starting with data generation and followed by data manipulation and transmission of data (and communication of information) as well as storing, retrieving and reproduction of data.

The generation of data could take place internally and/or externally. Data generated need to be captured by recording facts and figures relating to occurrences in some form such as sales slips, personnel forms, purchase orders, etc.

The captured data may be **stored** either in human memory, or in a document or in a mechanical/electronic device (like microfilm, punched cards, tapes, etc.) or through some suitable device before they are utilised.

Stored data would have to be **retrieved** from the medium where it is stored by searching out and gaining access to specific data elements.

Retrieved data may be **converted** or **reproduced** in a different form of storage or presentation format like documents, reports, etc. After the transfer of data to storage from the source, next step is **data processing**. The processed form of data is then passed on to the user, who again returns it to storage after use.

Randomly accumulated data have to be **stored** and classified to reveal appropriate information. For example, sales data can be classified product-wise, territory-wise salesperson-wise, etc. Such a classification will give the sales data more meaning.

Sometimes aggregation or synthesis of many pieces of data may be required to structure a meaningful whole or complete report.

Processing of data might entail quite a bit of manipulation and calculations involving addition, subtraction, multiplication, division, etc., based on certain formulae. Computations may be necessary for deriving employee's pay, customer's bill, financial ratios, etc. Operational research models may be used for determining optimal product mix, aggregate planning and determination of economic order quantity.

Data stored must be utilised on some occasion by someone. Otherwise there is no point in storing it. When data is finally put in a usable form it can be retrieved and turned into information at appropriate time.

Some type of a continuous verification and evaluation of data ought to be undertaken. Therefore, data files should be continuously monitored to eliminate useless data. For example, very old data files which have lost their significance should be discarded. It is important to **destroy data** following its evaluation or use. Destruction of data records may be on a purely routine basis following one time use, or periodical review of old records. Destruction is the terminal stage or the end of the data life-cycle. The data life-cycle is depicted in Figure 12.2:
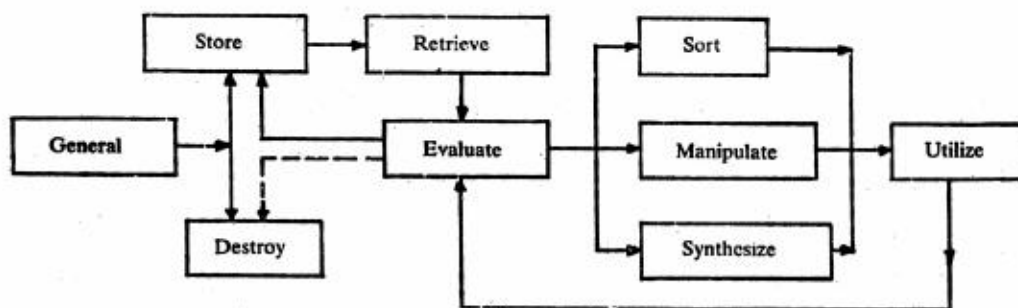

Figure 12.2: Data Life Cycle

12.7 INFORMATION ECONOMICS

Value of Information

To be of 'value' there are certain desirable characteristics or attributes of information. Information must primarily possess attributes of relevance, availability, timeliness,

objectivity, sensitivity, comparability, concisenses, and completeness. Quantifiability is desired to the maximum extent possible. The quality attribute refers to the presence or absence of ambiguities in information. Measures of quality are validity, accuracy and precision. These aspects of quality are especially important and are applicable to quantified information. Perfect quality is very costly and perhaps impossible to ensure. Low quality information has an adverse effect on organisational performance. The applicability of data is relative to the needs of primary and secondary users, operations personnel, control personnel, maintenance personnel, etc. The quality of information is determined by how it motivates human action and contributes to effective decision-making. Information may be evaluated in terms of 'utilities' which may facilitate or retard its use. These 'utilities' are explained below:

1) **Form utility:** If the information is presented in the same form as required by the user, its value increases. For instance, if the manager is looking for a graph depicting the sales history, he appreciates receiving the information in the graphical form rather than in a tabular form.

2) **Time utility:** Information has greater value to the decision-maker if it is available when needed. If it is made available well ahead of time, the recipient might forget about it. On the other hand, availability after the due time might have no relevance. Therefore, information should be provided to the decision-makers in the office at the appropriate time. The main problem here is that the decision-maker may not be knowing when he requires various information. In such cases information should be provided within the shortest time possible.

3) **Place utility (accessibility):** Information has greater value if it is accessible or delivered easily. On-line systems maximise both time and place utilities. It is very important to have the information available at the place desired.

4) **Possession utility (organisation location):** The possessor of information determines its value by controlling its dissemination to other. Information is power, or rather one who has information has the power.

Though it is difficult to quantify the utility of information, one aspect worth considering is **information satisfaction** which means the degree to which the decision-maker is satisfied with output of the formal information system.

Bias and Errors

Managers have a strong bias towards quality of information. It is possible to estimate the bias of the decision-maker and provide him suitably adjusted information.

Here you should also know about errors in information. Errors, a more serious problem, may result due to the following reasons:

1) Incorrect data measurement and collection methods
2) Failure to follow correct processing procedure
3) Loss or non-processing of data
4) Wrong recording of data
5) Inaccurate history (master) file (or use of wrong history file)
6) Mistake in processing procedures
7) Deliberate falsification.

In most information systems, the receiver of information might have no knowledge of either bias or errors affecting its quality. The difficulties with errors may be overcome by internal controls to detect errors, internal and external auditing, higher levels of 'confidence limits' to data, and user instruction in measurement and processing procedures so that user can evaluate possible errors. The first two methods attempt to reduce the uncertainty about the data and therefore increase the information content. The last two remedies provide the user with confidence limits.

Value of Perfect Information

In the decision framework, there could be decision-making under certainty where we assume existence of perfect information regarding outcomes. In decision-making under uncertainty, we assume only a knowledge of possible outcomes but no information as to probabilities. In decision theory, the value of information is the

value of the change in decision behaviour caused because of availability of information less the cost of obtaining the information. Given a set of possible decisions, a decision-maker will select one on the basis of the information at hand. However, if a new set of information changes the decision, then the value of the new information is the difference in value between the outcome of the old decision and that of the new decision, less the cost of obtaining the new information. The value of perfect information can be computed as the difference between the 'optimal' policy without perfect information and the 'ideal optimal' policy with perfect information.

The concept of the value of perfect information is useful because it demonstrates *how information may influence* or change decision. However, decisions are usually made without the right and appropriate information because the needed information *is usually not available,* or the effort to acquire the information may be too great and too costly, or there is no knowledge of the availability of information, or the *information is not available in the form needed.*

Check Your Progress C

1) What is data life-cycle?

....

....

....

2) Differentiate between bias and error in data.

....

....

....

3) State whether the following statements are True or False.

    i)   Timeliness is an important attribute of information.

    ii) If the information is provided in the same form as required by the user, it may be referred to as time utility.

    iii) Failure to follow correct processing procedure results in errors in data.

    iv) Given a set of possible decisions, a decision-maker will select one on the basis of the information at hand.

12.8 DATA COLLECTION METHODS

In many cases the data needed may exist in an accessible form and you have to merely identify the source. As discussed earlier, this kind of data is called **secondary data.** It may be available within the organisation in internal records or from external sources such as advertising agencies, professional associations, government agencies, trade publications, etc. If the data are available from such secondary sources, the researcher has saved time and money. However, he must be careful to evaluate secondary data, since they were collected for a variety of purposes and under a variety of conditions that may limit their usefulness. Secondary data should be checked for impartiality, validity and reliability.

When satisfactory secondary data are not available, you have to collect the data from primary sources. Primary data also may be found in internal sources or external sources or both. Now let us briefly study the methods of collecting primary data as well as secondary data.

Methods of collecting Primary Data

There are several methods which one can use for the collection of primary data. The important methods are: 1) observation, 2) interviews, 3) questionnaire, and 4) schedule. Let us briefly study these methods:

1) **Observations:** In this case you have to collect the information through personal observation and intensive study of the phenomenon when it actually occurs.

2) **Interview:** The desired information is obtained by interviewing those persons who are supposed to have knowledge about the problem under investigation.

3) **Questionnaire:** In this method, the information is collected from various sources by mailing the questionnaire containing a list of questions relating to the problem under investigation. The questionnaire is mailed to the persons concerned and the respondents are requested to answer the questions and return the questionnaire.

4) **Schedule:** In the case of schedule method, the questionnaires are sent through enumerators. These enumerators personally contact the respondents, ask the questions listed in the schedule and fill the answers themselves.

Sources of Secondary Data

Secondary data can be collected from two sources: 1) published sources, and 2) unpublished sources. The sources of published data are usually the official publications of the Government, governments of foreign countries, international bodies (e.g. United Nations Organisation, World Bank, etc.), trade associations, chambers of commerce, banks, stock exchanges, technical and trade journals, books, newspapers, magazines etc. The sources of unpublished data are varied and such material may be found with scholars, research workers, trade associations, etc.

12.9 DATA PROCESSING METHODS

In every organisation, a certain amount of paper work is required for data processing. It can be done in a variety of ways. In the past, data processing consisted of manual operations with the aid of pencil, paper, slide rule, etc. Then came the electro-mechanical method which involved operations with the help of machines. The use of typewriters, cash registers, time clocks, etc. followed in succession.

The punch card equipment came into use along with the 'unit record system' whereby data were punched (recorded) on a card. A number of cards placed logically and sequentially in a deck was termed as 'file'. There was considerable reduction in the manual efforts with the introduction of punch card equipment. However, it was only after the development of the electronic computer that machine became capable of performing most of the operations without intermittent human intervention. Today data processing is generally associated with a computer or electronic data processing (EDP).

The computer essentially consists of input device, a central processing unit CPU) and output device. Data fed into computer can be retained, stored and processed as per instructions and the results obtained in print; and can also be retrieved from its memory whenever needed. A computer executes the instructions given to it and performs various operations at very high speed. It is particularly suited for highly repetitive type of calculations.

Significant technological development in recent years (especially in the field of electronics) has reduced the cost and size of the computer to such an extent that organisations of almost any size can benefit from computer data processing.

12.10 PRESENTATION OF DATA

To be of any use for decision-making and action, data must be presented in a proper form so as to convey the relevent information meaningfully. Too often managers are swamped with raw computer printouts, neatly bound to impress them. They are routinely fed reports which serve little purpose when operations are progressing smoothly. But when a crisis does occur, a day or more is required to get the relevant information.

Processed data (information) may be required by managers for problem-solving as well planning, coordination and control of ongoing activities. Depending on the purpose in view, data may be presented in the form of tables, diagrams, charts,

graphs, descriptive and analytical reports which are discussed briefly in the subsequent portion.

Tabular Presentation

This is a technique of arranging data in an orderly **monner** in rows and columns. Horizontal arrangement of data is called rows and the vertical arrangement is known as columns. Tabular presentation facilitates comparison of data, helps in identifying the desired values, provides a basis for analysis, and exhibits the trend of data.

Diagrammatic Presentation

Besides tabular form, data can also be presented in the form of diagrams and graphs having a grater visual impact. Visual presentation of data eliminates the dullness of numerical data, makes the comparison of data simpler, helps in locating various statistical measure, and establishes trends of past performance. A diagram should have a concis and self-explantory title. Colours and shades may also be used to exhibit various **comdone and in it** The available space should be optimally utilised to make the diagram signification.

Diagrams may be classified into three catagories:
1) One dimensional diagrams, 2) two dimensional diagrams, and 3) three dimensional diagrams.

In the **one dimensional diagrams**, values are indicated only by the length of lines or bars. The length of each bar is proporticnate to the magnitude of given data. Negative values can also be shown in these diagrams and the bars can either be prepared horizontally or vertically.

One dimensional diagrams may agins be of different types, e.g., I) Simple bar diagrams, 2) multiple bar diagrams, 3) subdivided bar diagrams, and 4) percentage subdivided bar diagrams. A simple bar diagram represents one value whereas the multiple bar diagram represents more than one value. A subdivided bar diagram represents different components of a given variable. When a subdivided bar diagram is prepared on percentage basis, it is called percentage.

Two dimensional diagrams are prepared on the basis **of length** and width. These diagrams signify area. Two dimensional diagrams are classified as: 1) rectangles, 2) subdivided rectangles 3) squares and circles, and 4) pie diagrams. For preparing a rectangle, its length and width are to be determined. A rectangle can also be subdivided and the subdivided rectangles also represent area. For preparing squares the square roots of the given data is to be calculated to determine the side of the square. Similarly, the radius is determined to draw the circle diagram. A pie diagram is a segmented circle, where the sizes of the various segments are in the proportion of the values of different components to the total.

Graphic Presentation

Presentation of data on a graph paper is known as graphic presentation. It renders comparison of data easier, helps in establishing trends of past performance and makes it possible to determine positional averages. Graphs are prepared on the basis of coordinated system of plotting points and joining them by lines. Graphs are of two types: 1) graphs of time series, and 2) graphs of frequency distribution.

Graphs of time series, also called **Historigram,** depict chronological data. Time, being the independent variable, is always taken on X-axis and the dependent variable is taken on Y-axis. This type of graph can either be prepared for one dependent variable or more than one dependent variable. A historigram can also be prepared for negative values. In case two dependent variables are given with two different units of measurement, the data can be represented by means of **mixed graphs.** Two vertical axes are taken in this case and two curves are drawn on the bases of these axes for the two variables. Another type of historigram is a **range graph** which is prepared to show the range of data. This graph is prepared to show how the extreme values (i.e., maximum and minimum values) of a dependent variable are changing with time.

Graphs of frequency distribution represent the data of frequency distribution. In this type of graph, the value of a variable is taken on X-axis and the values derived from

1) histogram, 2) frequency polygon, 3) frequency curve and 4) ogive.

A **histogram** is a series of rectangles which are proportionate in width to the magnitude of class intervals and proportionate in area to the frequency pertaining to that class interval. When class intervals are all equal, the height of the rectangles will also be numerically proportionate to the frequency. In case the class intervals are unequal, the height will be proportional to frequency density. A **frequency polygon** is constructed by plotting the density of frequencies against the mid points of classes. It can also be prepared first by preparing a histogram and then by putting dots against the mid points and then joining these dots by straight lines. It is extended on both the sides of histogram. The area under a histogram and a frequency polygon is always the same. A frequency curve is prepared by free hand to smoothen the frequency polygon. It is a generalisation of frequency polygon.

An **ogive or a cumulative frequency graph** depicts cumulative frequencies. We can either prepare a "less then" ogive when cumulative frequencies are in ascending order, or a "more than" ogive, when cumulative frequencies are in descending order. An ogive helps us to locate median and other partition values.

To know the procedures of preparing tables, diagrams and graphs read unit 7-9 of ECO-07 Elements of Statistics (Elective Course in Commerce)

Check Your Progress D

1) Differentiate between questionnaire method and schedule method of data collection.

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2) Differentiate between diagrammatic presentation and graphic presentation of information.

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3) Match the following:

Item A	Item B
i) Investigator watched the incident and noted details.	a) Questionnaire method
ii) Respondent himself has written the answers for a series of questions.	b) Observation method
iii) Investigator asked some questions and noted the answers.	c) Schedule method
iv) Investigator asked some questions which are written on a paper and noted the responses on the same paper.	d) Interview method

12.11 LET US SUM UP

Over the years with the growing complexities and volume of activities of any organisation, the importance of information has increased manifold. The term data refers

to a collection of facts and figures or a set of numbers which are unrelated and uninterpreted. In the present day business environment, information is regarded as one of the basic components of managerial decision-making.

Data may be classified in many ways. Based on the nature of data, it may be classified as financial data and nonfinancial data. Depending on the source, data is classified as internal data and external data. It can also be classified as primary data and secondary data on the basis of its origin. Similarly, information may be classified as: 1) action and nonaction information, 2) recurring and nonrecurring information, 3) documentary and nondocumentary information, 4) internal and external information, and 5) historical and future projections.

Data also has its own life-cycle starting with data generation, followed by data manipulation, transmission, storing, retrieving and reproduction.

The value of utility of information increases depending on circumstances. It is quite difficult to quantify the desirable characteristics of information. There are four basic methods of collecting primary data: 1) observation, 2) interview, 3) questionnaire, and 4) schedule. Initially data processing was done manually. With the technological development, a number of mechanical devices such as typewriters, cash registers, time clocks, punch card equipment, computers, etc., are introduced for the purposes of data processing. Presentation of information in a useful form is very important. Information may be provided in the forms of tables, diagrams and graphs.

12.12 KEY WORDS

Data: Raw facts and figures which when suitably processed, give us information.

Diagrammatic and Graphic presentation: Presentation of data in the form of diagrams and graphs.

Information: End product obtained by processing raw data for a particular requirement.

Tabular presentation: A technique of arranging data in an orderly manner in rows and columns. Horizontal arrangement of data is called rows and the vertical arrangement is known as columns.

12.13 ANSWERS TO CHECK YOUR PROGRESS

A	4)	i) Information		ii) Data		iii) Information	
		iv) Information		v) Data			
B	4	i) False		ii) False		iii) True	
		iv) False		v) False			
C	3	i) True		ii) False		iii) True	
		iv) True					
D	3	i) b		ii) a		iii) d	
		iv) c					

12.14 TERMINAL QUESTIONS

1) Explain the major reasons for the ever increasing need for data processing.

2) What impact would i) the technological revolution, ii) research and development, iii) product changes and iv) the information explosions have on the need for information by management in a light commercial vehicle manufacturing company, a health care delivery system and an engineering college?

3) Describe the importance of data and information in modern organisations.

4) Define the terms 'data' and 'information'. Discuss the differences between these two terms with appropriate examples.

5) Take any situation in an organisation and illustrate how a data life-cycle works in such a context

6) Find a user of information in any organisation of your choice and identify some important reports that he or she receives. Ascertain or estimate the cost of this report and its value.

7) Write explanatory notes on the following:

a) Data analysis
b) Data life-cycle
c) Data processing.

Note : These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the university for assessment. These are for your practice only.

UNIT 13 USE OF COMPUTERS

Structure

13.0 OBJECTIVES

After studying this unit, you should be able to:

- explain the use of computers for efficient office management

- evaluate the role advantages and limitations of computer-aided decision-making in office management

- outline the nature and uses of the common types of software used for application on computers.

13.1 INTRODUCTION

In unit 11 you have briefly learnt about the use of computers for data processing in office management. In this unit you will study in more detail about the computer. You will learn about the various component units of a computer, input and output devices, types of software used, computer applications, and advantages and limitations of computers.

13.2 EVOLUTION OF COMPUTERS

An account of the development of computer technology is the story of a revolution that began in the 1940s. The first commercial computer was large enough to fill up a big room. It was so expensive that only a US Government department could afford it. One had to be a mathematical wizard to operate it. Compare this with the present desk top Personal Computer. Its speed, processing power and versatility is far superior to this early machine. Even a child can operate it effectively and its price is well within the reach of an average person. All this progress has taken place in the incredibly short span of about 45 years. There is no other form of technology or branch of science that matches the phenomenal progress of computer technology.

The phases of evolution of computers are commonly termed as 'generations'. Usually, an important technological breakthrough or conceptual reorientation in the field of hardware or software, trigger the birth of a new generation, pushing the earlier generation into obsolescence. You may find a twenty year old car or 15 years old radio, but seldom you come across anyone using a vintage computer system. The economics and operational advantage of switching over to a new system weigh heavily against continuation with an older machine. You must also remember that the main thrust of technological progress in computers is towards producing smaller,

faster, cheaper and more user-friendly machines. In recent times, however, generation changes have become both defused and controversial. There are so many parallel developments in every facet of computer technology, that it has become almost impossible to pinpoint a particular year or event as the beginning of a new generation. Even now, there is a lot of debate on whether we are at the end of the fourth or at the beginning of the fifth generation. For all practical purposes, however, you may safely assume that we are somewhere in the grey zone between the fourth and the fifth generation.

Today, computer technology has permeated every sphere of existence of modern man. From railway reservations to medical diagnosis, from TV programmes to satellite launching, from match-making to criminal catching—everywhere we witness the elegance, sophistication and efficiency possible only with the help of computers.

The introduction of this technology to enhance the efficiency of typical office functions, however, has been an offshoot of its recent development. It was only made possible when the price of a computer came down to the affordable limits of a common office and it could be operated by an average office worker.

The growth and development of this technology, however, has largely by passed India. In spite of some promising attempts at fundamental research during the fifties, by and large, this technology has not had the desired impact on our country.

13.3 COMPONENTS OF COMPUTERS

A computer has four major components as follows:

1) The **memory** to hold data and results of calculations,

2) The **processor**, where the calculations are performed,

3) The **puses** to transfer the data back and forth between the memory and processor.

4) The **input and output** units to read data and write results.

The machines which help the input/output, storage of information, and the processor are collectively known as the '**Hardware**'. Thus, the physical units of a computer system constitute the computer hardware. When you look at a computer system, you are actually looking at the computer hardware. These hardware units are directed through instructions to achieve an objective. The instructions to the computer can be grouped together to form programmes, and a set of programmes which aim at performing a task, is known as '**Software**'.

A computer, like the human brain, receives information, stores it, processes it, and displays results. A computer receives information from **input devices**, stores it in the memory, processes this information in the **central processing unit** and displays the results of processing in a useful form through **output devices**. The memory of the computer like the human memory is limited. Ience, it stores most critical information in its main memory and less critical, less frequently used, and more voluminous information in its secondary memory.

The Central Processing Unit is composed of the **Arithmetic Logic Unit (ALU)** which computes the mathematical functions like addition, subtraction, division and multiplication. It has also a **memory** (like the human brain) where data to be processed can be stored. There is also a **control unit** which handles the job of controlling the entire working system of the computer comprising the input, CPU memory, ALU, and the output devices.

The functions and component units of the computer are summarized in Figure 13.1.

Classification of Computers

C.P.U. (Processor)
Arithmatic Logic Unit
Performs mathematical calculations
Primary Memory
Acts like the memory or the brain of the computer.
Control Unit
1. Directs and controls the activities of the computer.

Input Devices

1. Punched cards
2. Punched paper tape
3. Magnetic tape
4. Key Board
5. Magnetic Ink Character reader
6. Optical scanners
7. Cathode Ray tube
8. Others.

Output Devices

1. Punched cards.
2. Punched paper tape
3. Magnetic tape
4. Printer
5. Cathode Ray tube
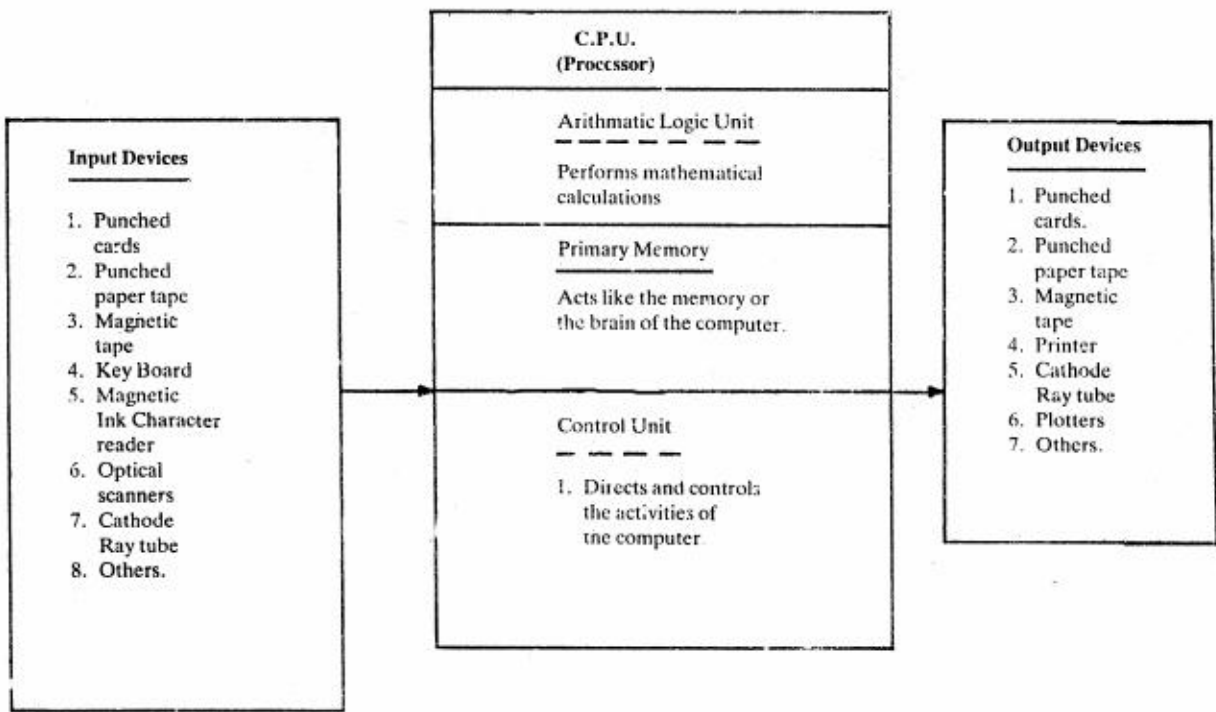6. Plotters
7. Others.

Figure 13.1: Diagrammatic Representation of a Computer.

The main criteria for classifying the computers are speed, cost, capability and size. Basically, computers are divided into four categories: 1) Microcomputers, 2) Minicomputers, 3) Mainframe computers, and 4) Super computers.

Microcomputers: These microcomputers are on the lowest end of the scale. They are normally single-microprocessor, single-user systems designed for performing basic applications like work processing, educational training, elementary database manipulations and playing games. They are mainly used in offices, homes and schools. According to their usage, microcomputers are further classified as home computers, personal computers, desktop computers, portable computers, etc. Look at Figure 13.2 to get the idea of a microcomputer.
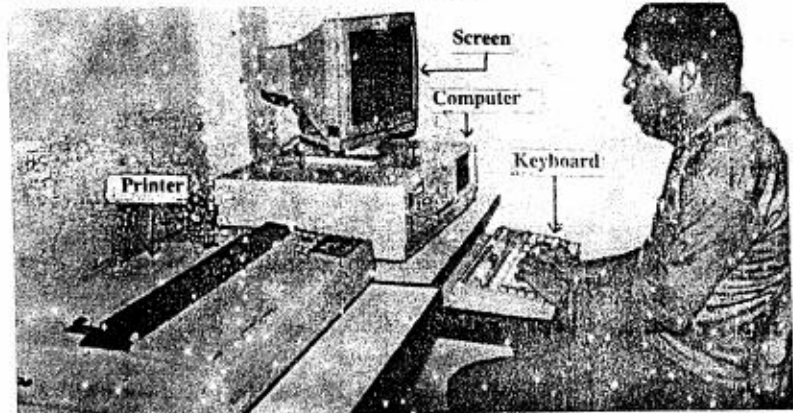
Figure 13.2: Micro Computer

Minicomputers: Compared with microcomputers, these minicomputers are more powerful in terms of processing power. Minicomputers are bigger in size and many users can use one simultaneously. They have greater storage capacity. They are mainly used in banks, colleges and medium sized organisations.

Mainframe computers: These computers tackle huge volumes of data. They are very big in size and more than hundred users can use one simultaneously. They are very fast and have immense amount of storage capacity. They are used by bigger.

organisations such as airlines, **rail ticket reservations, scientific institutions, etc. They** are very expensive. The cost can range from a few lakhs to a few crores. Look at the mainframe computer shown in Figure 13.3.
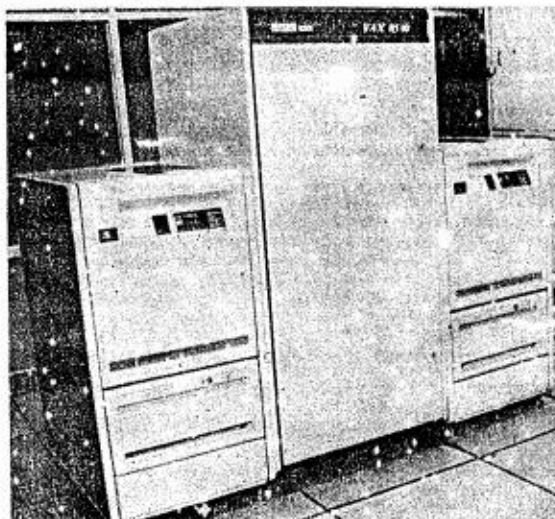
Super computers: These are the most powerful of all computers. Each computer has several processors running together giving it immense speed and power. It can handle huge amounts of calculations which are beyond human capabilities. Super computers are used for applications such as weather forecasting, nuclear science research, aerodynamic modelling and powerful simulations in physics and chemistry. India has only one super computer which is used for weather prediction. They are very expensive, costing several crores.

13.4 INPUT AND OUTPUT DEVICES

The various input and output devices are briefly described below:

It is a card having 80 columns and 10 rows, on which holes are punched at the appropriate place to represent character and numbers. It is the most ancient (few decades old) input medium. Instruction and data punched on cards were input into a computer through a **card reader.** A printed card survived a number of decades because of its simplicity, but is on its way out now. Punched cards are being replaced by keyboards which provided direct data entry. Look at the punched card presented in Figure 13.4:
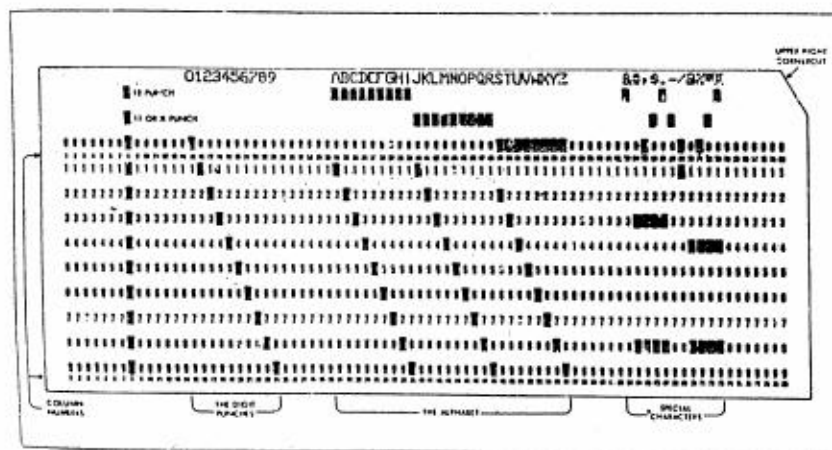

Figure 13.4: Punched Card

Magnetic Tape

A magnetic tape is a very compact medium for storing a large amount of data. A standard tape reel is 2400 feet long, 1/2 inch wide and stores up to anywhere from 20MB to 150MB depending on the recording density it permits. Magnetic tape is mounted on a **tape drive** which has a read/write head. Look at the magnetic tape shown in Figure 13.5:
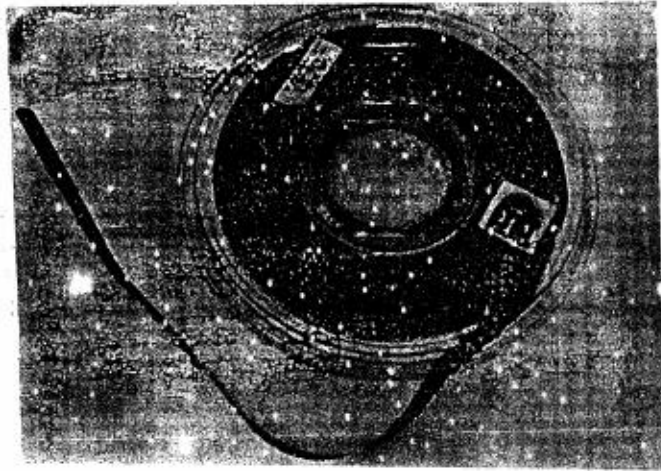
Figure 13.5: Magnetic Tape

The **density** of a magnetic tape refers to the amount of information stored in one inch of its tape length and is measured in bits per inch (bpi). Standard tapes come with 800 bpi or 1600 bpi, even though tapes with 6250 bpi are also common. A text-book of 600 pages with 50 lines per page and 40 letters per line can be accommodated in less than 20 feet of tape of density 6250 bpi. Imagine how much data can be stored in a 2400 feet tape?

One of the major advantages of a tape is its economic storage of large volumes of data. However, it has a major disadvantge too. It permits only serial access of data. This is because the read/write head is fixed or immovable. As a result the tape has to be moved physically over the read/write head till we come to the desired location to access the required data.

Keyboard

It is one of the most common input devices. Its operations are similar to conventional typewriters. The layout of the keyboard is also like that of the traditional typewriter, although there are some extra command and function keys provided. Substantial development has taken place in the keyboard design to minimise operator's strain. In a multi-language environment like in India, special keyboards have been designed to provide character set in different languages. Look at Figure 13.6 for the picture of keyboard:

Figure 13.6: Keyboard

Terminal

Terminals have become very pupular interactive input and output units. A terminal, when connected to a CPU, sends data and instructions directly into the computer. Terminals can be classified into two types, namely **hard copy terminals** and **soft copy terminals**. A hard copy terminal provides a print-out on paper whereas a soft copy terminal provides visual display on a screen. A soft copy terminal is also known as a **CRT (Cathode Ray Tube)** terminal. Terminals are also classified as dumb terminals or intelligent terminals depending upon provision for any intelligence or otherwise at the terminal. Current technology has brought about a low price differential between intelligent and dumb terminals. This encourages increasing use of intelligent terminals. **A graphic display terminal** displays information in both character and graphic forms. These are extensively used for CAD/CAM (Computer Aided Design/Computer Aided Manufacture) applications. Terminal is shown in Figure 13.7:
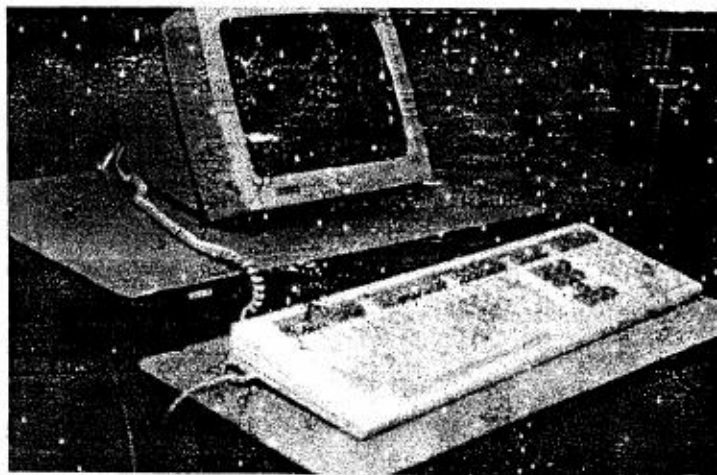
Figure 13.7: Terminal

Pointing Devices

As you know, the keyboard provides facility to input da . and commands to a computer in text form. But, while working with a display based computer system, we find that we are mostly pointing to some area in the display to select a menu option, and then move across on the screen to select subsequent options. The keyboard provides cursor keys for this purpose, but these tend to be cumbersome and slow where we have to manipulate the keys to effect both horizontal and vertical movements on the screen. There are several pointing and drawing devices which facilitate this operation, such as the mouse, light pen, trackballs, joy-stick, etc. These are commonly in use with computer systems. Look at the mouse (pointing device) shown in Figure 13.8:

Figure 13.8: Mouse (Pointing Device)

Printer

The main disadvantage of a display screen is that information displayed on it is lost from view when new information is displayed. A printer solves this problem. It provides a permanent record of the results of processing in printed form on paper. This is called the hard-copy output. There are several types of printers used on computer based systems. Look at the printers shown in Figure 13.9:

Figure 13.9: Printers

The choice of printer is related to the needs of a particular application. There is a considerable variation in cost, speed, quality of print, etc. The most commonly used printers with microcomputers are **dot matrix printer**. These are generally low cost as compared to line printers or page printers. These are slow, but usually adequate for small volume output. The quality of the print of a dot matrix printer is not as good as that of a daisy wheel printer, a line printer or a page printer. **Daisy wheel printers** produce better quality output. However, they have a limitation as regards the character set available. A change in font/size of the character involves a change in the daisy wheel itself. For high speed operation **line printers** may be used. These may produce 100 to 300 lines per minute compared with around 50 lines per minute by a character printer. Line printers are usually used where large volumes of printed output are required. Even higher speeds of 1000 lines or more per minute are possible by using **page printers**. Page printers are usually the most expensive printers. These are quieter as compared to line or character printer, and offer specialised facilities.

A printer can take paper in the form of either single sheets or continuous stationery. One can also use pre-printed stationery such as paper with letterheads. Some printers can also produce the high resolution graphics on paper by copying the contents of the screen on to paper. This is known as 'screen dump.

Source Data Automation

Most recent trend for data input is towards source data automation. The equipments used for source data automation capture data as a by-product of a business activity thereby completely eliminating manual input of data. Some examples are:

1) **Magnetic ink character recognition (MICR)** devices are generally used by the banking industry to read the account numbers of cheques directly and do the necessary processing.

2) **Optical mark recognition (OMR)** devices can sense marks on computer readable papers. This kind of device is used by academic and testing institutions to grade aptitude tests where candidates mark the correct alternatives on a special sheet of paper. These answer sheets are then directly read by the optical mark recognition devices and the information sent to a computer for processing.

3) **Optical Bar Code Readers (OBR)** can scan a set of vertical bars of different width for specific data and are used to read tags and merchandise in stores, medical, records, library books, etc. These are available as held devices.

Magnetic disks facilitate direct/random access to data in store, as compared to the sequential processing mechanism for data on magnetic tape. It is helpful to visualise a magnetic disk as the track of an LP record. **Disks can be broadly classified into floppy disks and hard disks.**

A **floppy disk** consists of various tracks which are concentric circles. A track is divided into sectors, which can be considered as smallest chunk available for data storage or retrieval. **Hard disk** can store much more information than a floppy disk. The capacity of hard disks, used in microcomputers, generally ranges from 20MB to 80MB. As the hard disks are protected by an outside covering, they are less prone to dust and environment. Winchester disks are the most commonly used hard disks in microcomputers. These provide substantially faster data access compared to floppy disks and provide very large data storage for on-line retrieval. Floppy disk is shown in Figure 13.10:

Figure 13.10: Floppy Disk

Check Your Progress A

1) Visit a computer centre and examine the parts of a computer

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2) Differentiate between computer hardware and software.

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3) What is a central processing unit in the computer?

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4) What do you mean by the density of a magnetic tape?

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5) Differentiate between floppy disk and hard disk.

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6) State whether the following statements are True or False.

i) Normally, four persons can work simultaneously on the microcomputer.

ii) Layout of the keyboard of a computer is similar to the typewriter.

iii) Line printer is faster than the page printer.

iv) The part of the computer which performs the computations **work** is called memory.

v) Physical uints of a computer system are called software.

13.5 SOFTWARE USED IN COMPUTERS

As discussed earlier, the term 'Hardware' refers to the physical components of the computer (like cathode ray tube, keyboard, printer, etc.) which one can see and touch. On the other hand, 'Software' consists of the programmes written by human beings to get the desired results from the computers. Software is primarily of two kinds: 1) system software which controls the functioning of the computer, and 2) application software which are the programmes written to achieve a desired result for the user. In this unit we shall discuss only about application software with which users are mainly concerned

Software available for computers include popular programming languages like BASIC, COBOL and FORTRAN. However, because of their large numbers and personal use, powerful applications sofware which do not require significant programming-knowledge have been developed to run on computers. The most important categories of software which enable a user to autonomously utilise a computer are:

1) Database Management Software
2) Word Processing Software
3) Spreadsheet Software
4) Graphic Software
5) Data Communication Software
6) Statistical Softwar
7) Operations Research Software

Let us study about these softwares briefly.

1. Database Management Software

Software packages called 'Data Base Systems (DBMS)' have been developed to handle the problems of maintaining and integrating large volumes of data on large computers. The DBMS package provides a very high level language interface which can be easily learned and used by a user who is not a computer programmer. In a few hours, it is possible to acquire enough skills to use the basic features of DBMS packages like dBASE III plus or Foxbase, which are the best selling software currently in this class.

Like other DBMS packages, dBASE III provides features for:

i) Creating data files on a computer

ii) Maintaining these data files by way of providing functions for adding, deleting, editing and updating a given set of data items

iii) Generating reports based on the data files created through the package

iv) Querying on these data files.

This package can be used for applications like maintaining personnel records or customer records, preparation of mailing lists and many other operations of a similar nature used in modern offices.

2. Word Processing Software

Word processing software is designed to enable the user to prepare typed documents. In word processing the main concern is with text. With dropping costs and the

increased productivity due to word-processing, today the computer can be used as a "cheap-typewriter"!

In order to prepare a document using a word-processing package, it has initially to be typed into the computer's memory from the keyboard. The main advantage lies in the ease' and rapidity with which the document can be modified. When several drafts of a letter or a report are to be typed, word processing is very economical and faster than manual typing. Law firms, contractors, newspaper offices, banks and government offices, etc., are some of the major users of word processing software.

3. Spreadsheets Software

The fundamental idea of value in such packages is the concept of an 'electronic spreadsheet'. A spreadsheet is simply a sheet of paper with rows and columns in which one can enter data in the form of numbers and text. For example, balance sheet is a spreadsheet, and a price list also is a spreadsheet. In fact most managerial reports are spreadsheets.

4. Graphics Software

While spreadsheets and database packages are very useful in doing analysis, the output of such analysis is generally in the form of tables. But the human brain is much more adept at picking up patterns from pictorial representations. As the old adage says that a picture is worth a thousand words, it is equally true that a picture is worth a thousand numbers. Computer accessible data can readily be converted to graphic form on the screen as well as on paper using dot-matrix printers or plotters. With plotters it is possible to have different colours (four colours is very common) Typical business graphics software enables data to be plotted as line charts, bar charts, and pie charts. Sophisticated business graphics software provides for three dimensional display and maps also.

5. Data Communications Software

In large organisations there is often a central computer for data processing which does routine data processing. Sometimes, a manager would like to get some of this data for processing on his personal computer. This is facilitated by the data-communications software—the personal computer can operate like the terminal of the main computer. Using this 'terminal emulation' facility, the manager can have access to data from his personal computer. Selected data can be 'down-loaded' into the personal computer's memory and stored in files on disks. Subsequently, he can analyse these files using DBMS or spreadsheet software. An example of this kind of use would be a situation where a mainframe data processing computer has files on sales of products, broken down by month and by region. Down loading on a personal computer would enable the user to analyse up-to-date data on product movement in different markets.

6. Statistical Software

A number of easy-to-use packages to perform standard statistical analysis are available. Typical capabilities are frequency distributions, cross-tabulations, tests for population means and proportions, analysis of variance, contingency table tests, regression and correlation analysis, etc. More advanced packages would include forecasting models, time-series analysis and non-parametric analysis.

7. Operations Research Software

Inexpensive packages are available for standard operations research models, such as linear programming, critical path analysis, resources scheduling, simulation, decision tree analysis and network flows. These packages are powerful enough to solve problems of moderate size. For example, practical linear programming models with less than 100 variables and around 50 constraints can be readily solved.

Nowadays you can find **integrated softwares** which combine several of the capabilities of packages listed above. For example, LOTUS 1-2-3 version 2 combines spreadsheet, database, graphics and statistical capabilities. Another example is FRAMEWORK which combines word processing, spreadsheet, database and graphics functions. The advantage of integrated software is that the user need not

learn to handle a variety of separate packages so that his learning time and effort is reduced. Another advantage is that the same data can readily be passed from one function to another. The disadvantage is that such software is expensive and makes greater demands on the computer resources.

Electronic mail is another facility which makes it possible to send messages over interconnected computers and thereby reduces the time taken to send a message from one point to another. For example, a letter will take a longer time if it is sent by post or by person. The same letter can be sent by electronic mail system within a couple of minutes.

13.6 COMPUTER APPLICATIONS IN OFFICE MANAGEMENT

A computer can be put to very many uses. Some of its uses in 'Business' and 'Government' are as follows:

A computer can be applied to almost all types of accounting and technical operations in business such as:

1) Inventory control

2) Financial and accounting applications like budgetary control and standard control

3) Production planning and control

4) Quality control

5) Personnel applications like payroll, provident fund accounting, etc.

6) Machine capacity utilisation

7) Marketing applications like sales forecasting, invoice preparation, etc.

8) Management information system, etc.

In fact, nowadays computers are used in almost all fields of business and industry.

Computers are used in all ministries and for almost all functions of the Government. A few examples are:

1) Economic planning

2) Fiscal and monetary planning

3) Foreign trade control

4) Population census recording

5) Elections

6) Studies of production and employment

7) Studies of national income

8) Broadcasting

9) Tax collection

The above examples indicate the use of computers in almost all spheres of activities in the government.

13.7 ADVANTAGES AND LIMITATIONS OF COMPUTERISATION

You have studied in detail various aspects relating to computers. Introduction of computers in offices, like all other mechanical devices, has certain advantages and disadvantages. Let us study them in detail.

13.7.1 Advantages

The following are the advantages associated with computer based decision-making:

1) Response time is greatly reduced.

2) Large volume of data can be stored for information and decision-making.

3) Accuracy of information is considerably improved, thereby improving the quality of the decision.

4) Problems can be handled more easily by using various operation research models.

5) The cost involved in the decision-making process is reduced.

6) Greater secrecy is possible as compared to the manual file system. Hence, chances of leakage of classified information are reduced.

7) It is possible to take quick decisions as the time for retrieval of information is very fast.

8) Paper work is reduced to the minimum as all the information is stored in the computer itself.

Emanating from the above, the following benefits may be attributed to computerisation:

1) Availability of accurate forecasts.

2) Preparation of short-term profit plans and long-term projections.

3) Provision of pre-plan information, for example, in budget preparation.

4) Calculation of variances between budgeted and actual results.

5) Triggering of revised forecasts if not proceeding in accordance with plans.

6) Early warning system for monitoring activities and the signalling of necessary reactive plans.

7) Indication of income and cash flows by following alternate investment strategies.

8) Accomplishment of the preceding items at a great speed.

For example, these days many educational institutions process examination results on computers. In any single year, in Uttar Pradesh state alone 13 lakh candidates go through high school stream and 6 lakh through the intermediate stream. The processing and publication of their results in time would not be possible without computerisation. It is also possible to maintain confidentiality of results on computer processing. Another example is computerised electricity billing adopted by several State Electricity Boards. In a single state undertaking like UPSEB it was estimated that the computerisation in Western U.P. district for electricity billing had resulted in a considerable amount of additional revenue. This also saves on additional labour by the office staff.

13.7.2 Limitations

Computers have played a relatively limited role as a management tool. This has been so because decision-making has not been their central utility. They have been used for purposes in personnel (e.g. payroll). book-keeping (e.g. accounting), technical data (e.g. capital projects) or specific functional area (e.g. materials). Alternatively, their usage in the offices is project-oriented to manage a specific programme of limited time and scope (such as processing of examination result), or problem-oriented for quick retrieval of information to meet a crisis situation of limited duration.

Some specific disadvantages of computerising of office work are as follows:

1) **Communication gap:** There may be a communication gap between the computer professional and the user of the system. There is a familiar situation where the computer professional is engaged in developing the computer-aided decision-making but is not able to communicate the same to the user. The information that the computer professional needed is called for, but the user cannot adequately express them as he has not been accustomed to a rigorous self-analysis. The computer professional works out a plan based on his own

understanding of the user-needs. When the programmer codifies and implements the system, his own interpretation get incorporated. Finally this may frustrate the user. This can be called the "ten-minute syndrone" where sufficient time has not been spent between the user and the computer professional to get all the needs clearly conveyed and understood.

Let us take processing of examination results as an illustration to see how the communication gap between computer professional and the user creates a problem. When grace marks are allocated by way of modertion. computer professionals allocated grace marks to all students. This resulted in glaring anomalies where some top ranking studies secared more than 100% marks by virtue of additions grace marks. It means the Controller of Examination har not explained to the computer professional the procedure of grace marks calculatior.Quite often, users are

2) **Reliance servle memberaus or computer wendors:** Quite often, users are approached be the indicating vender who brain-washes the management into buying his system, indicating that the system has all the sulutions to the management problems. The end-result is that the user gets a system which is either too large or possesses inodequate computer power for his needs.

There have been cases wherean organisation had appointed a service bureau. for a large sum of money, to develop a corporate MIS. After waiting one year and spending a few lakhs of rupees, the user-organisation was thoroughly dissatisfied with the recommendations of the service bureau and did not implement it.

3) **Lack a master plan:** Most computer failures are due to lack of master plans to which hardware acquisition, software development, and individual design can be releted. Without such a pla, "islands of mechanisation" result withlittle integration between separate systems.

TISCO studied the interface of various systems like production planing and control system, financial control system, and sales invoicing and order processing system. It was observed that if individual systems were developed without regard to their mutual interfaces, the result would be an absenceof communication between the systems and the incompatibility (unsuiability) of the system would prevail throughout the company. This was prevented by building up sufficient linkeges among these systems and developing anintegrated approach according to a master plan. Asimilar approach with encouraging results was also adopted by TELCO in their offices:

4) **Organisation of the management information system:** In many enterprises there is a trend in favour of computer-aided decision-making, inainly under the user with his own computing power. The personal computers (PCs) have made this trend practicable, with individual databases available to the users. Similarly, terminals are available to most important users to share contral computing power. In both cases (personal computers as well as terminals) the control of the computer-aided activity has to remain with the user-manager.

5) **Lack of good management system:** For successful computer application, good planing and control within the framework of an efficient organisational structure is nessary. Computers are not useful when the system of data management is chaotic. There are many organisations where computerisation has not brought any tangible improvement because they have not paid attention to systematic handing of data.

6) **Managerial participation:** The most critical problem in effective computer utilisation is the need for understamdng and support from top management. For instance in Andhra Pradesh, the Chief Minister's personal interest has encouraged the spread of computerised Management Information System (MIS) gradually to all the district offices apart from their widespread use in state departments and in the Secretarial.

Ever after top management support is ensured, it is necessary for the use to participate in the design phase of computerised Management Information System so as to avoid subsequent extensive and time consuming re-work. This can be called "overnight syndrome" where users spell out their needs and expect the computer professionals to deliver the output immediately thereafter. Uttar

Pradesh State Electricity Board, for instance, introduced computerised electricity billing for the Western Districts. In the design phase, the Board dictated that only Agra and Ghaziabad should have pilot project before its extension to all other districts. It is also decided to continue manual financial ledgers for at least two billing cycles so as to generate enough confidence in the computerised ledgers. The result was a smooth introduction of computerisation. Another State Electricity Board introduced computerised process without any pilot project. There were many erroneous bills and questions were raised in the Parliament. This has led to the constitution of an enquiry committee under the Central Electricity Authority to investigate the mistakes. Finally, computerised billing was dropped, after having spent several lakhs of rupees.

It makes good sense, when the user picks up familiarity with the computerised management information system at the beginning. From the point of view of the organisation, especially if it is large, computerised MIS is as important as other operations such as marketing, finance, etc. Indian Airlines discovered that users like office staff had to be involved in order to get better and more effective information systems. A similar approach is being followed in LIC.

7) **Failure to identify information needs:** Identification of information needs is very crucial for designing a computerised Management Information System. Recently, a Central Government Department spent huge sums on hardware and software to perpetuate the existing 53 management information system reports and to build a sophisticated data bank, without first determining the real information needs. Information which can increase the perception of users in critical areas (such as problems, alternative opportunities and plans) only should go into computerised management information system. But in most cases, this aspect is ignored.

Two state governments had built up comprehensive land record data banks without examining the user needs. The enormous costs for building the data banks were later found to be unjustified and both the States had to discontinue their efforts. On the other hand, Utta. Pradesh has begun on a limited basis to build up data bank for 200 parameters for a couple of districts. After ascertaining the user needs from this experience, it is proposed to extend it further to all the other districts.

8) **Poor systems prior to computerisation:** It has been observed that computerisation of a poor system will merely increase inefficiency at an accelerating rate. The user gets irrelevant information and bad decisions are made sooner.

9) **Overlooking human acceptance:** A computerised system quite often meets resistance from the user-organisation because people do not accept what they do not understand. Such reasons for resistance have to be analysed and a new attitude brought into overcome it. Ross identified the persons as 1) threat to the status and ego of the concerned persons, 2) economic threat to the concerned persons (fear of loss of job), 3) insecurity for the persons having personal powers and political base 4) loss of autonomy and control for the concerned persons, and 5) frayed inter-personal relations for all others

A number of public and private sector organisations such as BHEL, Hindustan Zinc, NTPC, Bhadrachalam Paper Board, etc., have started a systematic training at the top level for computer appreciation, at the middle level management for specific computer applications within their own domains, and at the working level for direct involvement in input and output quality control. It is good to see a large number of Indian organisations going through such an elaborate process of computer initiation as there is no shortcut to it.

Check Your Progress B

1) Differentiate between system software and application software.

....

....

....

2) What do you mean by integrated software?

....

....

3) Visit an office which is using computers and find out the following:

   i) Software used

   ....

   ....

   ii) Problems faced by them in using the computer.

   ....

   ....

   iii) Benefits derived by them from the use of computer.

   ....

   ....

4) State whether the following statements are True or False.

   i) Word processing software is useful to draw graphs.

   ii) Mailing lists of customers may be prepared with the help of data communication software.

   iii) By storing the information in the computer, paper work in the offices may be reduced.

   iv) Lack of masterplan leads to islands of mechanisation where separate systems within the organisation are not integrated.

   v) Computers are not useful when the system of data management is chaotic.

13.8 LET US SUM UP

Today computer technology has permeated every sphere of existence of modern man. The introduction of this technology to enhance the efficiency of typical office functions, however, has been a offshoot of its recent development. This has become possible when the prices of computers came down to the affordable limits of a common office and it could be operated by an average office worker.

A computer. like the human brain receives information, stores it, processes it, and displays it. Computer receives information from input devices, stores it in the memory, processes that information in the central processing unit and displays the results of processing in a useful form through output devices. Various input output devices include punched card, magnetic tape. keyboard, terminal, printer, pointing devices, magnetic disk, etc., which have been explained in detail.

Based on the speed, cost, capability and size, computers may be classified as:
1) microcomputers, 2) minicomputers, 3) mainframe computers and
4) supercomputers. In this classification, microcomputers are at the lowest end of the scale whereas supercomputers are at the highest end of the scale.

Software refers to the programmes written by human beings to get the desired results from the computers. Software is primarily of two types: 1) system software which controls the functioning of the computer, and 2) application software which are the programmes written to achieve a desired result for the user. The most important categories of application software are: 1) database management software, 2) word processing software, 3) spreadsheet software, 4) graphic software, 5) data communication software, 6) statistical software, 7) operations research software.

Nowadays several integrated softwares, which combine several of the capabilities of packages listed above, are available.

These days computer applications are found in almost all spheres of activities in business and the government. There are several advantages of using computers in the office management. However, there are several limitations as well in the use of computers which can be overcome in due course of time.

13.9 KEY WORDS

Application Software: Refers to the programmes written by human beings to achieve a desired result for the user.

Central Processing Unit: A part of the computer which acts like the brain of the computer to perform mathematical calculations and controls the functioning of the whole computer system.

Hardware: The physical components of the computer such as cathode ray tube, keyboard, printer, etc., which can be seen and touched.

Input Devices: Parts of the computer which feed information to the central processing unit.

Integrated Software: Refers to the software which combines the capabilities of several individual softwares.

Output Devices: Parts of the computer which receive the result put out by the central processing unit.

Software: The programmes written to get the desired results from the computer.

System Software: The software which controls the functioning of the computer.

13.10 ANSWERS TO CHECK YOUR PROGRESS

A	6)	i) False	ii) True	iii) False	iv) False	v) False
B	4)	i) False	ii) False	iii) True	iv) True	v) True

13.11 TERMINAL QUESTIONS

1) Employees in modern organisations are called 'knowledge workers'. Justify.

2) Handling of information is the basic component in the office management process today. Do you agree? Give reasons for your answer.

3) What is electronic mail and Database Management system? What are their uses in connection with office management?

4) What is integrated software? In what way it is advantageous for use in an office?

5) Give examples of the way computers can be put to use in government and business firms.

6) What is the difference between computer Hardware and Software. Describe four different types of software.

> **Note :** These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the university for assessment. These are for your practice only.

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AOCOM - 01
Office Organisation
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Block

4

OFFICE STATIONERY AND FORMS MANAGEMENT

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BLOCK 4 OFFICE STATIONERY AND FORM MANAGEMENT

Every office requires a large variety of stationery and supplies for day to day work. They are important for the effective and efficient performance of office operations. Lack of office stationery and supplies reduces the efficiency of clerical staff. This leads to a difficulty in correspondence and communication with the outside persons dealing with the office. Since office stationery and supplies are important for smooth operations of the office, therefore, they should be stored in the best possible manner and a proper control should be exercised over them. Office forms are the basic tools of all the office work. They help in collecting and supplying information in a systematic manner. They are permanent record of transactions and events. In this block you will learn about the office stationery and supplies, storage and control of office stationery and office forms.

It consists of three units.

Unit 14 deals with importance and types of office stationery and supplies, selection of stationery, various methods of purchasing stationery, and the purchase procedures involved.

Unit 15 discusses the importance of storage, requirements of good store-keeping system, basic factors affecting handling of statistically in stores, centralisation and decentralisation of store-keeping, store records, control over stock and regulating consumption.

Unit 16 explains the meaning, importance and types of office forms, advantages and disadvantages using forms, forms design, forms control and use of continuous stationery.

UNIT 14 OFFICE STATIONERY AND SUPPLIES

Structure

14.0 OBJECTIVES

After Studying this unit you should be able to:

* ennmerate different items of stationery used in modern offices

* sclect office stationery

* explain the importance of managing stationery

* describe the procedure for purchase of stationery

* outline the principles of purchasing stationery

* formulate standards for stationery to be purchased.

14.1 INTRODUCTION

A large variety of stationery is needed in every office. For smooth and efficient performance of the office work, proper selection, procurement and storage of stationery is very necessary.

We cannot think of an office without paper work, and to think of paper work without stationery is beyond imagination. A typical phenomenon of modern business is the huge amount of stationery that is used in offices. It has been found that an American aytinivuke manufacturer uses a ton of paper for every ton of automobile produced. This explains the importance of controlling the use of stationery in offices. Expenses on stationery and allied supplies constitute thirty to forty per cent of total non-salary costs in offices, and yet stationery is a rather neglected aspect of office management. Experience has shown that with proper control over buying, storing and issuing stationery, office expenses can be reduced up to twenty five per cent. In this unit, we shall identify the items of stationery required in modern offices, and explain how to make proper selection of office stationery, the procedure of purchasing stationery, and the advantages of standardired stationery.

14.2 TYPES OF STATIONERY USED IN MODERN OFFICE

Stationery and supplies are used in every office, whether it be small or big. Following are the main items of stationery used in modern offices:

1) **Paper:** Most of the office work is done on **Paper. For** the production and preservation of records we always need paper. Even if we speak of computers, we do have to use paper to have computer printouts. Paper is required for following purposes:

    i)   Writing pads

    ii)   Scratch pads or slip pads

    iii) Note sheets

    iv) Letter heads

    v)   Printed or cyclostyled forms of different types

    vi) Ordinary papers or thin paper for obtaining carbon copies

    vii) Stencil papers

    viii) Duplicating paper

    ix) Carbon papers

    x)   Computer rolls, Teleprinter rolls, and Calculator rolls

    xi) Registers.

2) **Other items:** There are most of other items of stationery required in modern offices, of which the important ones are:

    i)   Ink, pencils, ball point pens, nibs, refills

    ii)   Rubber stamps and stamp pads

    iii) Pen stands

    iv) Typewriting ribbons

    v)   Pencil and typewriting erasers

    vi) Gum, cellotapes

    vii) Envelopes

    viii) Allpins, clips, rubber bands, tags, stapplers

    ix) Sealing wax and candles

    x)   File boards, file covers and file boxes

    xi) Brass seals

14.3 IMPORTANCE OF MANAGING STATIONERY

Control over the consumption of stationery has remained rather a neglected aspect of office management, though it is as important as management of machines and personnel. Stationery items are the tools of office workers' if they have to produce the best, they must have good tools too. The cost of stationery has increased tremendously during recent years; it is, therefore, essential to eliminate waste of stationery through judicious purchasing, efficient storing and proper system of issuing. Need for proper management of stationery ari es due to the following reasons:

1) **For saving expenditure on stationery:** The cost of stationery has increased tremendously during recent years and with passage of time there has been considerable increase in the consumption of stationery also. All this has resulted in heavy increase in office costs. It has, therefore, become essential to maintain effective check on purchase, consumption and storage of office stationery.

2) **For maintaining control on quality of stationery:** Using stationery of inferior quality does not lead to economy. Rather it leads to reduction in efficiency, causes annoyance to office employees and create bad impression on outsiders. Maintaining control on quality of stationery used in the office is, therefore, an important aspect of stationery management.

3) **For ensuring uninterrupted availability:** For carrying on the office work, stationery has to be made available to office workers at right time and in sufficient quantity. Non availability of stationery can bring the office work to a stand-still. Of course, stationery should not be procured in such large quantity that it keeps on lying unused for months. Such a situation can lead blocking of funds and cause deterioration in quality.

14.4 SELECTION OF STATIONERY

The first step in purchasing stationery is to decide on the exact specification of stationery to be procured. For example, it has to be decided as to what should be the size of the paper, its quality (expressed in weight of 480 sheets in pounds) and whether it should be of ordinary quality or bond type of paper. Selection of stationery is the process of choosing the right type of supplies which suit the purpose for which they are meant. Two types of stationery are mainly available in the market: (i) the standard type, bearing some reputed brand name, and (ii) non-standardised type which may be less costly but of poor quality. The standardised items though costly, can be put to use efficiently and make a good impression on outsiders. It is wrong to think that non-standardised cheaper stationery is more economical. It may prove more expensive in the long run. However, new products keep coming in the market, which should be tried, it found useful and economical.

If the exact specifications regarding size, dimensions, quality, etc, of the stationery have been decided in advance it will surely enable the purchase officer to place orders for various items in clear and specific terms and the departments using stationery well be sure of the quality. It will also facilitate standardisation of stationery.

The basis on which different items of stationery are selected is discussed below:

1) **Paper:** Paper is the one single item of stationery which exceeds all other items in value. Paper is used for various purposes, e.g., preparing rough drafts of letters, writing notes, printing letter heads, making carbon copies, printing office forms, etc. What type of paper should be acquired for different uses will depend on:

   a) The period for which it has to be preserved

   b) Handling it will have to bear

   c) Copies of the document will be made

   d) Requirement of paper of different colours

   e) Paper to be used in machines

   f) Paper for bound books.

   It is not advisable to always use the best quality paper.

   For example, ordinary paper may be quite suitable for scratch pads and also prove more economical, but for letter heads good quality paper is a must.

2) **Carbon Paper:** Carbon papers are of two types: (i) thick and (ii) thin. Thick carbon papers can be used for longer duration but the impression on the copies is not so sharp and clear. Thin and fine carbon papers give sharp impression but their life is short. For typed copies, fine quality carbon paper is generally, preferred.

3) **Typewriter Ribbons:** A wide variety of typewriter ribbons are available in the market. If the quality of ribbon is not good the impression on paper will not be clear. Single use ribbons give very clear and distinct impression and, the letter typed with such a ribbon looks as if it has been printed. The use of two colour ribbon, i.e. black and red, should be avoided because very little matter is typed in red colour.

4) **Staplers:** Stapling machines of different sizes and models have specific uses. There are desk staplers, heavy duty staplers, long-reach staplers, flyer staplers, etc. Only *good quality staplers should be purchased. Money spent on cheap staplers goes waste as the stapler become useless after sometime.*

5) **Pencils and Pens:** With the advent of bell point pens and high -tech pens the use of pencils and fountain pens has become rare. Pencils are now used by stenographers only for taking dictation. It should be ensured that refills for ball-point pen are of very good quality. Cheap refills get dried up soon and cause frequent irritation to the staff.

6) **File Covers:** Large umber of file covers are required in officers. Superior quality file coverts, thought costly, are durable while cheap varieties cannot withstand ordinary wear and tear.

7) **Other items:** A typierat problemt with glue is that it mayspill over the container and dry up. If the require in any department is heavy it can be purchased in bottle packs. For other users co apsible plastic tubesmay be convenient and economical as there is no spill over during use and does not dry up.

Allpins and paper clips should be purchased in small packings of present rusting due to long-exposure toair. Other items like tags, sealing wax, adhesive tapes, rubber bands, etc. should be purchased in small pack and of should be standard quality.

14.5 ESSENTIAL REQUIREMENTS FOR A GOOD SYSTEM OF DEALING WITH STATIONERY

The following essential requirements should be kept in view in setting up a system of dealing with stationery:

1) **Efficient buying:** Efficient buying implies buying at competitive rates, from reliable suppliers, availing of maximum discount on purchase and ensuring adequacy of stock keeping in view the rate of consumption and available storage space.

2) **Proper storage:** Stationery should be stored properly so as to minimise the risks of damage, deterioration, and theft, as well as to facilitate periodical checking.

3) **The issuing system:** Issue of stationery always be against requisitions to be on record so that wasteful consumption and misuse can be prevented.

4) **Control by the office management:** Office manager should establish a system of control over stationery so that purchases are made according to estimated use of various items of stationery. Proper records are maintained of supplies received and issued to user departments, and there is periodical checking of stock in hand by physical verification.

14.6 PRINCIPLES OF PURCHASING STATIONERY

Purchasing the right type of stationery, at the right time, in right quantities, at competitive prices, and from reliable sources are the basic responsibilities of the office manager as regards stationery and supplies. Purchasing being a specialised function, the following principles should be borne in mind to meet the requirements of office work economically.

1) **Identifying sources of supply:** Before actually placing purchase orders for stationery, alternate sources of supply must be explored. Depending on the quantity and quality of items required, it is necessary to ascertain the capability and reliability of the suppliers. Hence, possible sources of supply may be considered and the terms and conditions of supply negotiated with the parties.

2) **Buying at competitive price:** Efforts should be made to purchase stationery of standard quality at competitive prices. Quotations may be invited for the purpose, which will indicate the rates, specifications of the items, quantity discounts, if any

allowed, the normal credit period, and the delivery time. Samples of particular items may have to be examined to check the exact quality.

3) **Buying the right quantity:** While placing orders for supply, consumption for a specific period has to be kept in view. The quantity to be purchased at periodical intervals. It is generally determined on the basis of average consumption per month or quarter and the lead time, that is, the time lag between ordering and actual supply. Due provision is also made to guard against the possibility of running out of stock due to failure of supply or increased consumption, which may be unanticipated.

Thus, the order quantity depends on the following factors:

i) average consumption in a given period

ii) time required in procuring fresh supplies

iii) availability of finance

v) risk of deterioration in quality overtime.

4) **Buying the right stationery of right quality:** As explained earlier, stationery of good quality should always be preferred while making purchase decisions. However, in respect of items for particular uses, ordinary quality may serve the purpose adequately, as in the case of (say) paper for scratch pads, on other hand in the case of most stationery items, purchase of sub-standard quality may result in inefficiency, delay and generate resentment among the office staff, while expensive items of very high quality may neither be required nor practicable to buy within the budget approved.

5) **Buying at the right time:** Timely purchase of stationery and supplies is another basic principle to be followed so as to ensure continuous availability. In practice minimum and maximum levels of stocks are generally predetermined. Order for fresh supplies is placed as soon as the existing stock reaches the minimum level. Some organisations fix the level of stock (known as the re-ordering level) when order for fresh supplies are placed. The ordering level is fixed keeping in view the time which the suppliers may take to deliver the items ordered and the rate of consumption of the same.

Both over-buying and under-buying are equally undesirable. Over-buying can lead to shortage of storage space, deterioration in quality, blocking of funds, and loss due to misuse or pilferage. Quality of carbon paper, typewriting ribbons, refills of ball-point pens, erasing fluids etc., are known to dry after a certain period of time.

Check Your Progress A

1) Which of the following statements are true and **which are false?**

i) To economise, cheapest stationery **available in the market should be purchased.**

ii) To take advantage of bulk order one year's **supply of stationery should be** purchased in the beginning of the year.

iii) To avoid inconvenience, stationery should be purchased from the **nearest** supplier.

iv) Buying stationery at right time means it should be bought **during period when** shops are open.

v) Over-buying and under-buying both have to be avoided.

2) What are the various types of paper necessary to be purchased for office work?

14.7 METHODS OF PURCHASING STATIONERY

Procurement of stationery at competitive rates from reliable suppliers can be arranged by identifying wholesalers and dealers, or through agents representing trading concerns. Any of the following method may be adopted for the purpose.

Tender System

Big buyers like local authorities or large business firms invite sealed tenders for the supply of stationery, specifying the quality and quantity required and the time allowed for supply. The delivery may be taken at one time or in instalments. Generally, the orders are placed with the suppliers quoting the lowest price and the most favourable terms. If the lowest prices for different items are quoted by different suppliers, orders can be placed with two or more suppliers.

Advantages

a) It enables purchases to be made at competitive rates.

b) It also ensures supplies of desired quality as it is specified while inviting tenders.

c) The rates quoted are not known till the sealed tenders are opened. This procedure guards against any possible collusion between a particular supplier and the purchase manager.

Disadvantages

a) The procedure involving time and cost is worthwhile only when large quantities are needed.

b) High rates may be quoted by tenders in collusion with each other.

Quotation System

Open quotations may be invited from suppliers (minimum of three suppliers) for different items of stationery, along with samples. Order for supply is placed with the supplier quoting the lowest price.

Advantages

a) The procedure is less time consuming and involves little clerical work.

b) Two or more quotations may be submitted by the same trader in different names.

c) Small lots may be purchased on the basis of lowest quotations.

Disadvantages

a) Two or more fake quotations may be submitted by the same trader under different names.

b) Reliability of the supplier may not be assured.

c) Collusion is possible between particular supplier and the purchase manager.

Buying from existing suppliers

Under this system, orders for stationery are placed with a few selected dealers again and again, if dealings with them have been found to be fair and the rates are reasonable.

Advantages

a) Intimate relations develop between the purchaser and supplier with the nation that the quality of goods supplied is satisfactory and the purchaser gets preferential treatment if particular items are not easily available in the market due to scarcity;

b) The purchaser is able to secure favourable terms and the price charged is also reasonable;

c) In case of complaint, the supplier is more accommodating.

Disadvantages

a) There may be unfair collusion between the purchase manager and the supplier with the result that the organisation may have to pay more for inferior goods.

b) The buying authority may become over-dependent on a few suppliers and not explore other sources of cheaper and better supplies;

c) It may be difficult to procure supplies in case of default by regular suppliers.

Spot purchasing

Purchases may be made by placing orders with sales representatives who visit the office and also carry samples of stationery items. Delivery is also arranged by them at the office itself. This is a very convenient method of buying provided the market rates are known and only standard items of well-known brands are procured. Another method of spot buying is one where the purchasing staff goes to the market and makes on the spot purchases from the market after comparing the quality and the prices offered by different dealers. But it leaves scope for unfair collusion between purchasers' staff and sellers. Spot purchases may also be made conveniently from cooperative stores. Super Bazar, Kendriya Bhandar, Sehkari Bazar, etc. which supply standard quality stationery at fixed rates. This method eliminates chances of collusion between purchasers' staff and sellers.

Buying from manufacturers

Some big organisations purchase stationery direct from manufacturers or from their sales depots or branches located in big cities. Bulk purchasing is thereby possible at wholesale rates. Manufacturing organisations having branches in different cities are: Kores India, Bharat Ribbon and Carbon, Camlin products, Indian Duplicators (Gestener), etc. These organisations often mail their catalogues and literature to bulk consumers.

The method of purchasing most suited to any organisation will depend on the quality and frequency of purchases required to be made. Thus, for a small office, the stationery may be locally purchased from the market inviting tenders or purchasing directly from manufacturers may be preferable in the case of large organisations with centralised buying of stationery.

14.8 CENTRALISED AND DECENTRALISED PURCHASE OF STATIONERY

In any organisation, the purchase function may be either centralised or decentralised.

Centralised Purchasing

Centralisation refers to purchasing of all stationery and supplies by the office under the direction and supervision of a single officer. Under this system, stationery items for the whole organisation are selected, ordered and procured by the central office headed by the office manager. Different user departments are issued stationery on the basis of requisitions made by the departmental managers. The quantity and quality of items to be procured are planned on the basis of estimates and specifications of stationery intimated to the Central office by the respective departments.

Advantages

Centralisation of purchase offers the following advantages:

1) **Efficiency of specialisation:** Centralisation ensures efficiency of purchasing through specialisation of persons employed for the purpose. They acquire skill and ability due to exclusive handling of the necessary activities related with procurement.

2) **Economy in purchase:** Under centralised purchasing, stationery is procured for all the departments of the organisation. Hence, orders can be placed for bulk supply. Bulk orders not only enable higher rates discount to be earned but also mean lesser handling costs. For bulk supplies, orders can be placed directly with manufacturers, thereby obtaining lower rates and uninterrupted supply.

3) **Better control on stationery:** Under centralised purchasing, maintenance of record and control over procurement and issue of stationery can be carried out more efficiently. Storage of various types of stationery can also be planned so as to make better use of available space and facilities.

4) **Saving the time and effort of departmental personnel:** With centralised purchasing of stationery, personnel of other operating departments can be engaged only in departmental functions for which they may be better equipped. Departmental head can also concentrate on managing the main activities of the department.

Disadvantages

Following are the major disadvantages of centralisation:

1) **Delay:** Quite often central purchasing involves delay in procurement of stationery. Requisitions from different departments sent to the central office may by procured and purchases made in due course of time. The urgency of departmental needs may not receive due attention.

2) **Impracticable if departments are dispersed:** If different units or branch offices of the organisation are located in distant places away from the head office centralised purchasing may not be practicable because of problem of delay and transportation costs involved.

3) **Delay in issuance:** If stationery is purchased centrally, it has got to be issued from a central place for use in different departments which may take quite sometime even if the user departments are housed in the same building complex.

4) **Errors in purchasing:** In spite of the best efforts, stationery procured by the central office may not exactly conform to the requirements of the departments concerned.

Decentralised Purchasing (Departmental Purchasing)

Decentralised buying is an arrangement whereby each department, branch or division of an enterprise undertakes purchase of its own stationery. Purchasing authority is delegated to the branch office manager or departmental head for selection and purchase of stationery required.

Advantages and Disadvantages of Decentralised Purchasing

From the demerits of centralised purchasing may be derived the merits of decentralised purchasing. Decentralised purchasing results in elimination of delay in procurement of required stationery. It also ensures procurement of stationery in conformity with the desired quality and design.

The demerits of decentralised purchasing are indicative of the merits of centralised purchase. Briefly, the demerits of decentralised purchasing are: (i) efficiency of specialisation cannot be secured; (ii) advantages of bulk purchasing do not accrue; (iii) supervision of the main functions of the respective departments may not receive full attention of the managers due to the additional responsibility of managing stationery and supplies.

In actual practice complete centralisation or complete decentralisation of purchasing may not be desirable. Stationery of special type of items urgently required by any department can be purchased by it directly, while standard items like letter heads, white paper, clips, tags, file covers, etc. may be purchased centrally.

Check Your Progress B

1) **Fill in the blanks with appropriate words given within brackets:**

   i) The system of invitong price quotations throught advertisement in the newspapers up to a certain date and time in sealed covers is knows as purchasing stationery throught .... (quotations/tender/spot purchases.)

   ii) When stationary needed by each department or branch ispurchased by itself, it is known as............................ system of purchase (centralised/dispersed decentralised).

   iii) Centralised system of purchase of stationary is ....when the depatments or branches are widely dispersed (practicable/unpracticable).

   iv) Procurement of the required stationery is .... under decentralised purchasing (Prompt, delayed).

2) Assume youeself to be the manager of a branch office located five km. away from the head office. Argue your case for decentralisation of purchase of stationery.

14.9 PURCHASE PROCEDURE

Whether the stationery is purchased centrally or departmentally there must be a procedure laid down for the purpose. Any haphazard method of purchasing can lead to waste of funds and procurement of inferior stationery in wrong quantities. A standard purchase procedure generally involves the following steps:

1) **Receipt of requisition:** The departmental requirements of stationery are communicated by sending a requisition to the central purchasing section or the agency for the purchase of specific items of stationery.

2) **Determining the quantity and quality to be purchased:** While deciding about the quantity of particular items to be purchased, the main factors considered are:

   i)   the quantity lying in stock

   ii) the rate of consumption of that item and

   iii) time required to get the delivery of supplies.

   Reports about the quality of stationery procured in the past may be obtained from departments using the items. For this purpose departmental heads may be contacted and their suggestions given due weight.

3) **Determining sources of supply and inquiring about prices:** As explained earlier, there can be various sources of procuring stationery. A decision has to be made about the reliable sources. Efforts should always be made to identify new and better sources of supply. Prices quoted by various suppliers should be compared and efforts should be made to procure stationery of standard quality at competitive rates.

4) **Placing order:** After determining the quality and the quantity of stationery to be procured, the next step is that of placing order with the suppliers. The order should clearly specify the supplier, the quantity, the quality and complete description of the items, price discount, terms regarding transport, time and place of delivery, and terms of payment. Usually four copies of the order are prepared. One copy is sent to the supplier, one is sent to the storekeeper, one to the gate-keeper and one is retained in the purchase department for record.

5) **Follow up action:** After placing the order it has to be ensured that there is no delay in execution of order by suppliers. Follow up enquiries should be made if delivery is not made on time, and depending on the reasons for delay, alternate sources of supply should immediately be explored. Names of unreliable suppliers should be removed from the list to avoid inconvenience in future.

6) **Receiving supplies:** Upon delivery of the supplies, the items received should be compared with description and quantity in the order. Defective items should be returned forthwith. On receipt of the supplies, the storekeeper will send a "Goods Receipt Note" to the accounts department, which will be the basis of making payment.

   The storekeeper will make entries in the Stationery Register of the different items on relevant pages. Where any special items have been requisitioned by any department, delivery of the same must immediately be intimated to the department concerned.

14.10 STANDARDISATION OF STATIONERY

Standardisation of office stationery means securing uniformity in the specification of the articles of stationery used in the office. It implies, for example, that the size of the refills should be such as will fit ballpoint pen of standard size. Similarly, the size of paper to be used for typing should conform to the roller of a standard typewriter. As far as possible, there should be predetermined standards regarding size, quality, weight, etc. of all the items of stationery. If there are no standards laid down, stationery of different specifications and of different qualities will be procured at different times. Out of these hetrogeneous lots some may not be usable. For example, the width of paper-roll may not fit the calculator in use. Stationery of wrong specification can result in delay of work, lead to inefficiency, and cause annoyance to office employees.

14.10.1 Determining Standards of Stationery

What should be the standards of various items of stationery depends on the following factors.

1) **Needs of the user department:** What should be the standards of various items of stationery will depend on the needs of the departments using the same. Suggestions should be invited from user departments about the particulars of stationery required like size, shape, weight, fineness, etc.

2) **Examining the requirements:** After considering the suggestions received from various departments, the purchasing section should examine the requirements of each item and try to reduce the number of types to the minimum.

3) **Make inquiries about availability:** After assessing the requirements of different departments, inquiries should be made about availability of those items in the market. The rates of various items should be compared with those of substitutes if any available.

It is only after considering these three factors that the purchasing authority should lay down standards for the various items of stationery and supplies to be procured.

14.10.2 Advantages of Standardisation of Stationery

Standardisation of stationery offers the following advantages:

1) **Uniformity:** It brings about uniformity in each of the items of stationery used. Correspondingly, the number of varieties to be purchased are reduced considerably.

2) **Ease in purchasing:** If the quality, size and other specifications of items are precisely known, orders can be placed accordingly, and defective or substandard supplies can be isolated quickly.

3) **Procurement of right type of stationery:** The danger of purchasing inferior or substandard stationery is eliminated.

4) **Bulk purchasing:** As only items of standard specification have to be purchased it may be possible to place orders for bulk supply. Thus, supply of items may be acquired at cheaper rates and on more favourable terms.

5) **Facilitates handling of stock-out situation:** With the same variety of standard items of stationery used by different departments of the organisation, there is scope for transferring surplus items in one department to another in need of the same. Thus, stock-out problems can be easily resolved.

6) **Reduction in need of storage space:** Standardisation of stationery leads to a reduction in the number of varieties of items purchased. As a result, there is considerable saving of the storage space.

Check Your Progress C

1) From the following, point out which steps are not necessary in purchase procedure of stationery in the office. Also opint out which step has been omtted.

   i)   Deciding about quantity and quality to be purchased.

   ii) Collecting samples of each and every article to be purchased.

   iii) Determining sources of supply and inquiring about prices.

   iv) Appointing an inspection committee.

   v) Placing order.

   vi) Follow up action.

2) How will you determine 'standard' of typing paper for your office?

3) Which of the following is not an advantage of standardisation of of stationery?

   i)   It brings uniformity in use of various items.

   ii) It helps in avoidance of theft of stationery.

   iii) It helps in reducing storage space needed.

   iv) It helps in procuring stationery at fixed prices.

14.11 LET US SUM UP

A large variety of stationery is needed in every office including items like paper, pins, clips, pens, pencils, stamp pads, envelopes, etc.

Management of stationery is as important as management of machinery and personnel. Proper management results in savings in office cost through elimination of waste. The stationery procured for the office should be of suitable quality and it should be available to the office staff as and when they need it.

Stationery for office use should be selected carefully. Cheap or inferior stationery decreases efficiency and causes annoyance to the office employees.

Office stationery should be bought in right quantity and from right sources. There should be proper system of issuing stationery so that misuse and pilferage is avoided. Proper storage is also essential to prevent damage or deterioration in quality as also loss by theft.

While purchasing office stationery the basic objectives should be to procure from the right sources, at competitive rates, in right quantity and at the right time.

Items of stationery can be purchased by inviting tenders, or quotations from reliable suppliers, or buying directly from known suppliers or from manufacturers, or from sales representatives who call in the office.

Two types of arrangements can be made for purchasing stationery viz., centralised and decentralised. Centralised purchase refers to the purchase of all stationery by the central office under the supervision of a single officer. Decentralised purchasing is also known as departmental purchasing where heads of branch office departments and division procure their own stationery. Both these arrangements have merits and demerits.

For purchasing stationery there should be a procedure laid down, which may consist of receipt of requisitions from departments, and deciding on the quantity and quality of stationery to be procured. Order for purchase is placed after making inquiries about alternate sources of supply. The last step is to receive and arrange storage of stationery.

Maintenance of uniformity in the specification of articles of stationery used in the office is termed as standardisation of stationery. It leads to uniformity of the items used, of purchasing and procuremen of the right type of stationery at the right price.

14.12 KEY WORDS

Computer Rolls: Rolls of paper to be fed into the computer to get results in print.

Cellotape: Gummed flexible plastic tape of 1/2" or greater width used to stick paper together.

Stapler: Small handy equipment which joins together sheets of papers with special type of steel or copper pins fed into it.

Tender: The system of inviting rates for supply of specified items in sealed covers within specified time. The rates quoted by different tenders are compared on a fixed date and the order for supply of goods is given to the tenderer quoting the lowest rates.

Standardisation of Stationery: Securing uniformity in the specification of articles of stationery used in the office.

14.13 ANSWERS TO CHECK YOUR PROGRESS

A) (i) false (ii) false (iii) false (iv) false (v) true.

B) (i) tender, (ii) decentralised (iii) Unpracticable (iv) Prompt.

C) 1) Steps (ii) and (iv) are not normally taken

   The missing step is: Receipt of requisition.

C) 3) (ii) and (iv)

14.14 TERMINAL QUESTIONS

1) Explain the meaning and nature of office stationery and outline its significance in a modern office.

2) State the various items of stationery used in modern office.

3) Why is it important to ensure proper management of stationery in the offices?

4) What points will you bear in mind when selecting various items of stationery for your office?

5) Explain the principles of purchasing office stationery.

6) What are the various methods of purchasing stationery? How will you select a supplier for an item of stationery to be procured in bulk?

7) As a office manager, suggest a suitable procedure for the purchase of stationery in your office.

8) Differenciate between centralised and decentralised system of purchasing stationery. Compare their relative merits and demerits. Which method will you adopt for a big organisation whose branches are located in different cities?

9) Lay down the purchase procedure for stationery in your office from the stage of receipt of requisition to the stage of receipt of ordered goods.

10) What do you mean by standardisation of stationery? What are its advantages? How will you determine the standards of stationery?

Note: These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

UNIT 15 STORAGE AND CONTROL OF STATIONERY

Structure

15.0 OBJECTIVES

After studying this unit you should be able to:

- explain the importance of proper storage of stationery

- distinguish between centralised and decentralised store-keeping

- maintain record of stationery

- describe the procedure of issuing stationery

- enumerate the steps for regulating the consumption of stationery.

15.1 INTRODUCTION

In the previous unit (No. 14) you have been familiarised with various aspects of selection and purchase of stationery. In this unit, we shall explain storage and issue of stationery and maintenance of records regarding stationery.

15.2 IMPORTANCE OF STORAGE

As explained in the previous unit, stationery is an important item of office expenses. It is therefore, necessary to store stationery and supplies carefully so that they do not deteriorate in quality or get damaged due to atmospheric conditions. With proper storage arrangements, changes of mishandling and pilferage can also be minimised. Stationery should be stored in such a manner that it can be taken out when required. If proper arrangement is lacking, articles may not be found when required and fresh purchases may have to be made unnecessarily. If no record about items received and issued is kept, stock in hand may not be easily determined and some items may run out of stock causing disruption in work. Improper storage can lead to careless use of office stationery, for example, expensive letter heads may be used for scatch paper; ink and gum may get spilled over, and pins and clips may get scattered and broomed away if their packet gets torn.

15.3 REQUIREMENTS OF GOOD STORAGE SYSTEM

To ensure proper storage and use of stationery the following aspects of a good system of storage should be kept in view:

1) **Sufficient Supplies:** Sufficiency of stock implies that there should neither be overstocking nor understocking of stationery. With excess stock, stationery may get damaged and deteriorate in quality, and the organisation has to bear the cost of storing and handling items not required in the near future besides locking up funds. There should not be under stocking either. Due to understocking, items of stationery may frequently run out of stock, disrupting office work. The ideal requirement is that there should be sufficient stock, neither more nor less.

2) **Proper care of stationery in stock:** Items in stock should be so arranged that while there is saving in space, items to be issued for use can be located without loss of time. Protection from dust and dampness is a must. To prevent insects, termites and pests carrying damage, it is necessary to arrange periodical use of insecticides and antitermite treatment of storage space. Pilferage and misuse can be prevented by locking systems and proper control over issues.

3) **Proper system of issue:** There should be a proper system of issue of stationery so that every section or department gets timely supplies against requisitions made by managers. The maintenance of systematic record of all issues of stationery is also essential. There may be days and timings fixed for issuing stationery, except under special circumstances.

15.4 HANDLING OF STATIONERY IN STORES

The following factors should be taken into account in connection with handling of stationery.

Location of the store room

The store room for stationery be located at a central place which should be within easy reach of all departments or sections using stationery. The exact location, floor space and layout of the storeroom will depend on the following factors:

i) **Quantity of stock:** A bigger room will be required if quantity to be stored is large. In a small office even a steel almirah can serve the purpose. The store room should not be divided by partitions or walls. For saving space, avoidance of unnecessary movement and facilitating supervision, the store room should consist of one room only.

ii) **Nearness to the entrance or lift:** The storeroom should preferably be located near the entrance, otherwise it will involve unnecessary manual labour for carrying supplies from trucks or tempos to the storeroom. Similarly, if the store room is located on first or second floor, it should not be far away from the lift, so as to facilitate carriage of supplies received from the lift to the storeroom. The problem may be more acute if after receipt, stationery has to be repacked and retransported to different branches located in different cities.

iii) **Avoidance of theft and fire:** The storeroom should be so located that it is free from hazards of fire and theft.

Physical arrangement of stocks

Stationery in stock should be arranged in the storeroom in a systematic manner well protected from the loss of damage. Poor arrangement like over-crowding the bins, piling stock over one another, stocking on the top shelves, in the passage, or at inconvenient places can cause much damage to the stationery. Also a lot of inconvenience may be experienced in locating stationery when required.

Some other factors which ought to be kept in view for storing stationery are:

1) **Provision of aisles for movement:** In every storeroom sufficient space needs to be provided for walking and for moving stocks. If trolleys are used for transporting

stock within the storeroom, sufficient space in aisles should also be provided for their movement.

2) **Keeping the stock properly packed:** As a matter of rule, broken or badly wrapped package should not be kept on the shelves. Items stored in broken packages get scattered and more often get broomed away rather than being used. Packages received with torn wrappers should be used first. If there are a large number of such packages, they should be rewrapped and then stored.

3) **Stocking in a manner that counting is easy:** Stores should be so arranged in shelves or on the floor (if necessary), that their counting is easy. For example, if we have fifteen packages of paper it will be better to stock them in three piles of five packages each rather than having one pile of five packages each rather than having one pile of six packets, one of five and one of four. A single glance should allow us to count the number of packages lying in shelves.

4) **Visibility of different items:** Different items of stationery in the shelves should be so arranged that all the items lying there are visible while looking at the shelf. For examples, packets of ink pots should be placed in front of packets of gum bottles, otherwise it will be difficul. to locate packets of ink pots when needed.

5) **Marking the contents on packages or on packets:** The quantity contained in each package should be legibly indicated on it. For example, on a packet of gum bottles, it should be clearly written "12 gum bottles of 250 ml. each." The marked side should be visible when packages are piled.

6) **Indicating the reordering stage:** The last package or packages to be issued should bear some indication that the stock has reached the minimum level and orders for fresh supplies has to be immediately placed. In some offices a red card or a sticker is placed under the string of the last package which contains the minimum stock. The wording on the stickers can be like this, **"This is the last package—make requisition for fresh supply before opening it".**

7) **Classification for storing:** Different items of stationery should be piled on shelves according to some classification. For example, papers of different types like cyclostyling paper, typing paper, loose sheets, etc. should be stored at one place and forms of different kinds should be stored at another place. Similar items should be stocked at one place.

8) Loose supplies should be stored in open end boxes in a flip up position.

9) **Numbering the shelves:** It may be convenient to number the shelves and exhibit on a card connected with the shelf the items stored therein. An index of items lying in different shelves can also be prepared to help easy location of required stock and keeping fresh arrivals in appropriate shelves.

15.5 CENTRALISED STORAGE

Centralised Storage: It implies storage of stationery at one central place, and not in each department or branch separately.

Advantages: Following are the main advantages of centralised storage.

a) **Better utilisation of storage space and equipment:** If all stationery items are stored at one place there can be better utilisation of office space for clerical operations. The storeroom can be located in the basement or a room may be used which is not otherwise suited for clerical work, or one where ceiling-high shelves can be placed for storage and storage equipments can be used conveniently. Attempt should be made to secure economy in the use of space.

In the decentralised or departmental arrangement, more expensive storage shelves or almirahs may have to be provided suitable to the furniture and fixtures of the departmental office. Besides available space may not be fully utilised.

b) **Better utilisation of stock:** There are many items of stationery which are infrequently required or required in very small quantities. If such items are stocked in each department. they may not be easily located when required and deteriorate in quality with the passage of time. If the storage is centralised, such items can be procured in relatively large quantities consistent with demands from one department or the other.

c) **Better supervision and stock control:** Better supervision and control of stationery is possible in the case of centralised stock keeping. The task of maintenance of stores can be entrusted to specially trained persons.

Disadvantages

The disadvantages of centralised storage are:

a) **Problem of carrying stationery to the user departments:** If different departments or branches of the organisation are located at a distance from the storeroom, it may involve them, resulting in the increase in re-transportation costs.

b) **Delays:** It may take quite sometime to supply stationery to departments requisitioning it. In the case of decentralised store-keeping stationery is readily available in the department itself.

c) **Overcrowding of items:** Centralised store-keeping means overcrowding of stationery therefore accessibility of each item is difficult. Whereas in case of decentralised store-keeping the overcrowding is avoided by stocking goods in each department.

Check Your Progress A

1) Give one expression for the following:

   a) Placing order for fresh supplies when the stock of material in store reaches the minimum level.

   b) When stationery and supplies for the entire organisation are stored at one place.

   c) Passage left in the storeroom for movement of people and goods.

2) Which of the following are not essential requirements of a store-keeping system:

   a) Storing all items of stationery in abundance.

   b) Storing like items together.

   c) Not classifying items for storage purpose.

3) Which of the following statements are true and which are false?

   i) Storeroom should be located near the place where stationery is unloaded.

   ii) Stationery should always be stored in almirahs having lock and key.

   iii) In the long run wooden shelves prove better than steel shelves for storing stationery.

   iv) Heavy items should be stored at the back of the storeroom.

   v) Centralised storage results in better utilisation of storage space.

4) How will you store papers of different types in storeroom. As a store-keeper what special care will you take?

15.6   RECORD OF STATIONERY

By record of stationery we mean keeping account of the quantity of various items of stationery received and issued and the quantity lying in stock. Record keeping not only helps in maintaining check on the misuse and pilferage but also facilitates control over consumption. Proper record keeping ensures timely procurement of supplies with a check on the available stock in hand.

Stationery Record Register

Record of stationery received and issued is usually maintained in a Stationery Record Register. Separate pages are earmarked in the register for each item of stationery, like letter heads, pins, clips, tags, stamp pad, etc. It has columns for date of receipt, quantity received, quantity issued, name of the department or person to whom issued and the balance in hand.

Name of item   Code No.

Date of Receipt	Quantity	Date of issue	Name of Deptt. or Person to whom issued	Requisition No.	Qty. issued	Balance in hand

To maintain record of consumption of stationery in different departments, separate issue registers can be maintained but there must be one stock register.

Stationery Stock Cards

Some organisations maintain Stationery Stock Cards instead of stock registers. A separate card is made for each item of stationery and this card has columns for date of receipt, quantity received, quantity issued, name of user department, requisition no., balance in hand, etc. The main advantages of stock cards-over stock registers are: (i) cards are more handy, (ii) while the stock register can be handled by one person at a time, different stock can be used by more than one person at the same time.

Stationery Stock Card

Item..................................   Maximum Stock ....

                                   Minimum Stock ....

Date	Receipts			Issues			Balance in stock
	Qty. Received	Invoice No.	Supplier	Qty. Issued	Requisition No.	Department	

15.7 STOCK TAKING

Stock taking means physical counting of stationery iteams lying in stock, For exampie, stock taking may involve counting number of bottles of gum, boxes of carbon paper etc. To verify physically against entries in the stock register.

Stock-taking can be done at the end of the year or at regular intervals say three or four times, in a year.

Annual stock-taking means physical verification of stock at the end of the year. It has certain drawbacks, of which the following are worth noting: (i) it implies great pressure of work at the end of the financial year, when employees are required to perform other duties also; (ii) pilferage or misappropriations taking place during the whole year, come to notice only at the end of the year; (iii) periodic review of stock is not possible which is essential to maintain check on old or "dead" stock.

Perpetual inventory or continuous stock-taking is another method of stock-taking which involves checking stock as a continuous operation. There is physical verification of a few items in store every day or every week. By this process each item gets counted three or four times each year. It proves convenient, if some person not connected with other store-keeping activities is given the task of stock-taking.

To maintain effective control over the stock of items which are valuable and are subject to the risks of pilferage and leakage, more frequent stock-taking may be arranged. Where minimum and maximum limits of stock have been predetermined, periodical checks should be conducted to verify that these norms are actually followed. In case of discrepancy between stock in hand and the balance stock as per stock register, the matter should be brought to the notice of the office manager so that it may be investigated and appropriate action can be taken.

15.8 CHARACTERISTICS OF GOOD SYSTEM OF MAINTAINING STOCK RECORD

A system of stock record keeping is considered efficient if it satisfies the following requirements:

1) Ease of locating stores should be ensured by a code number for each item of stock and an indication as to its exact location in the storeroom.

2) Estimating how long the stock in hand is expected to last.

3) Identification of items in stock which have to be procured i.e. re-ordered, and those having excessive stock in hand.

4) Identification of the supplier with whom order should be placed for different items.

5) Keeping in view items ordered, suppliers concerned and expected date of delivery of supplies, and taking necessary follow up action.

15.9 CONTROL OVER STOCK OF STATIONERY

To facilitate availability of stationery for use and avoidance of overstocking, maintaining control over the quantity of stock in hand is essential. In the absence of such control there may be overstocking or understocking. **Overstocking can result in deterioration in the quality of stationery, and understocking can result in out of stock position of indispensable items at inconvenient times.**

The following measures are considered useful for maintaining effective control over stock in hand:

i) **Fixing levels of maximum and minimum stock.** By experience and estimation of requirements, maximum and minimum levels of stock can be fixed Maximum level of an item indicates that the level of stock in hand should not exceed a particular

quantity at any point of time. For example, it may be decided that the number of file covers in store should never exceed 500 at a time. Minimum level specifies that the stock in hand of an item should never fall below a certain limit, and order for fresh supplies should be placed as soon as the stock in hand has reached the minimum level. By adhering to maximum and minimum stock levels, both overstocking and understocking are avoided. The maximum and minimum levels should be reviewed from time to time. It may be found that the levels originally fixed were either too large or too small, or changes have taken place in the rate of consumption of some items.

ii) **Maintaining perpetual inventory.** Perpetual inventory refers to day-to-day recording of stationery available in hand by noting down every receipt and every issue of stationery in the stock register. Maintaining perpetual inventory not only involves additional clerical work, but also makes it difficult to keep stock records up to date specially during rush periods. Moreover, it also requires checking on the physical existence of stock, as shown by the stock-register or cards.

iii) **Preparing list of inactive items.** Some items of stationery keep on lying in store, but are seldom requisitioned. Such items are called inactive items. The storekeeper should prepare a list of such items and submit it to the office manager for review. This can help in preventing the funds being locked up unnecessarily.

Check Your Progress B

1) Fill in the blanks with appropriate words given in brackets.

a) Record about stationery received and issued is usually kept through .... (Ledger/cash book/stationery record register).

b) Physical counting of stock at the end of the year is called .... (Final stock taking/annual stock taking/physical stock taking).

c) By maintaining maximum and minimum levels of stock .... stocking are avoided (over and under/good and bad/cheap and costly).

2) Which of the following statements are true and which are false?

a) Stationery record register and stock cards serve the same purpose.

b) In annual stock taking it is difficult to maintain check on old or 'dead' stock.

c) Minimum stock level means the minimum quantity of stationery for which order should be placed at one time.

d) Considerable funds of the organisation remain blocked in inactive items lying in store.

15.10 ISSUE OF STATIONERY

In a small organisation stationery can be issued from the office to individual users without any formal requisition in writing, but in large enterprises, a systematic procedure should be laid down for issue of stationery. This is necessary to regulate consumption and to avoid wastage and misuse. The procedure for issuing stationery should be evolved in consultation with departmental heads so that unnecessary red-tapism does not hamper day-to-day work. The procedure should aim at maximum saving of time, labour and cost.

The following procedure may be adopted in a medium or large sized office for effective control over use of stationery.

1) **Written requisition.** Stationery should be issued against written requisition slips, which should be signed by a manager authorised for the purpose. The authority to sign requisitions should be granted only to responsible persons preferably holding supervisory positions, like section officer, accountant, assistant engineer, supervisors, and above.

2) **Frequency of issue.** In many offices stationery is issued to different sections or deparments once a month or fornight, and the days and time of issue are also

fixed. For example, stationery may be issued in the first week of every month between 10 a.m. and 1 p.m. But this does not mean that the timings be so strictly observed that work is held up for want of stationery. It should be possible to make stationery available at any time if there is urgency of need.

3) **Issue of right quantity.** Stationery should be issued in right quantity. Tendency to over-draw should be discouraged. Some storekeepers adopt the policy of supplying a smaller quantity than what is requisitioned. If the users know it they may requisition more than the quantity actually needed, keeping in mind the storekeepers cut. It is better to estimate the requirements correctly and issue sufficient stationery at a time. Piece-meal issue of stationery i.e. issue in small lots increases the work of the storekeeper and the users.

Further the practice should be to issue stationery on first-in first-out basis, that is, older stocks should be issued first and the newer ones later. This helps in saving stationery from getting stale and obsolete.

4) **Dispensing in right packages.** Different items of stationery should be issued in packets or containers containing definite number of items like 25 dot pen refills, a dozen pencils, a quire of paper, etc. Generally, stationery items are sold in pre-packed containers, say, a box of 500 pins, or of 100 clips, or of 25 sheets of carbon papers. As far as possible, the issue units should be a pack of items which facilitates counting and handling.

5) **Delivery at user's place.** Requisitioned stationery should, preferably, be delivered at the work place of the users. The representatives of user departments or sections should not be required to come to the storeroom to collect stationery. Such an arrangement reduces wastage of working time of departmental staff.

6) **Entry in stock registers/cards.** Particulars of all stationery issued should be entered in the stock registers or stock cards. Signatures of persons receiving the stationery should be obtained in the stock register. Keeping account of stationery received and issued helps in ascertaining the quantity of each item lying in stock.

7) **Making arrangement for getting fresh supplies.** Whenever the balance stock of any item reaches the minimum level, or reorder level, the storekeeper should prepare a list of all such items and make necessary arrangements for purchasing them.

Informal system of issue. In some offices, experiments have been made to issue stationery to any employee, without any kind of written requisition. No record of issue is kept. This is known as honour system of issuing stationery. It has made employees of lower level feel important and has brought an element of prestige and self respect among them. It has been observed that the increase in expenditure due to misuse of stationery has been lower than the cost of maintaining records of stationery. Also there has been considerable reduction in inconvenience caused by red-tapism.

15.11 REGULATING CONSUMPTION

Stationery is costly and its consumption should be controlled. Misuse by individual employees may seem insignificant but collectively it may assume serious proportion. Suppose an employee wastes about four white sheets of paper a day, the daily wastage will come to 1000 sheets if there are 250 employees in that office.

There are many items which cannot be over-consumed, but for many items there are chances of clerks unnecessarily over stocking their desks. There is always a constant temptation to stock up the "home office". Office pads can be passed on to school going children for being used as rough exercise books, pencils, pens, erasers, carbon papers, rulers, pins, clips, scratch pads, cellotapes etc. can be easily put to private use by employees.

The following steps can be taken for regulating consumption and misuse of stationery.

1) **Proper estimation of consumption.** The office manager should try to estimate stationery requirements of every section, branch or department on the basis of scientific and empirical studies. The needs can be estimated on the basis of persons

employed in the branch or department, the number of note sheets used per month etc. Consumption of stationery of different departments can also be compared. For example, if the personnel department having strength of ten employees has been consuming twenty scratch pads enquiry may be made to ascertain why the public relations section employing four persons should use thirty pads. The quantity of stationery to be issued to different departments or sections should not depend on whims of the persons requisitioning it. It should be based on real needs periodical self audit of stationery consumed may be carried out in different departments or branches, which can be helpful in checking misuse.

2) **Responsibility of persons signing requisitions.** Every person authorised to sign requisition slips for issue of stationery should be advised to exercise his discretion before signing requisitions of apparently excess quantities.

3) **Charging the cost of issued material to the department or branch.** Departmental heads or branch managers are not usually conscious of the cost of stationery used in their departments although the total expense on that account may be quite large. They can be made to realise the implications of ignoring the cost of stationery if the respective departments or branches concerned are charged with the relevant costs while preparing departmental accounts. This may not involve much clerical labour or accounting routine.

4) **Proper dispensing.** Stationery should be packed in convenient units. For example, if the monthly needs of clips of an office assistant are one hundred, the clips should be supplied in a box containing 100 clips and not 500. There is unnecessary wastage of small items like pins, clips, paper fasteners, staples, etc. due to over-issue. If experience shows that there is greater spoilage of certain items, the same should be supplied to users in small packets or envelopes.

5) **Use of ball-point pens.** Ball-point or high-tech point pens should be used instead of the conventional pencils. Refills of ball-point pens should be of good quality, and should be fully usable. Refills of inferior quality dry out too soon.

6) **Economising on typewriter ribbons.** There is considerable expenditure on typewriter ribbons. It is more economical to use durable ribbons. Two colour ribbons (Black and red) prove more costly because the black half is used several times more than the red one, and the unused red part has also to be discarded when the black part has worn out. For heavier machines, like billing and accounting machines, heavier ribbons may prove to be more economical. Single-use ribbons should be used for typing very important letters only. To check pilferage of ribbons, new ribbons should be issued against used ribbons.

7) **Economising on carbon papers.** A wide variety of carbon papers of different grades are available in the market. Some types of carbon papers do not make sharp imprints on the copy but last for longer period. Some types are of very fine quality, which give sharp impressions, but their life is short. Carbon papers should be selected as per requirements. If the number of copies to be obtained is more (eight or more) fine quality carbon papers should be used. Heavy weight carbon papers should be used only when one or two copies have to be made. For general purpose medium hard quality should be used. Carbon papers meant for use with pencil or ball pens, are hard, heavier in weight, and last longer. For production of copies by pencil or dot-pens only such grade of carbon papers should be used. It proves advantageous to use carbon papers manufactured by reputed companies. Not more than a fornights supply of carbon papers should be issued to users at a time.

8) **Economising on ink, glue and paste, cellotape etc.** It is not wise to use best quality, heavily advertised, fountain pen inks. Any standard quality can serve the purpose well and is quite cheap.

If too much of pasting work is to be done, as in the case of libraries, glue or paste bottles of 200 or 500 ml. can be issued. A lot of paste is wasted because of drying up and spillage. Users should be advised not to throw away the jars and spreaders, for the empty jars can be refilled from bigger packings of five or 25 litres. Empty jars should not be filled to the brim as it leads to wastage due to spillage. A peon can be assigned the duty of filling empty glue jars of employees by going to their seats say, once a week or fortnight.

9) **Saving on scratch pads.** A large quantity of scratch pads are consumed in every office for rough notings and figure work and for writing memos. Scratch pads are made from trimmings of papers which are available at very low prices. When bound together under a cover these become quite costly. Instead of using scratch pads, ordinary white fully-scap papers can be conveniently used, and prove quite inexpensive. Old absolete forms can also be bound together and used as scratch pads. Blank side of obsolete forms can also be used for printing or cyclostyling new forms.

10) **Economising on utilisation of paper.** Instructions should be issued to staff to use both sides of paper when doing routine correspondence or issuing notices, bulletins etc. Light weight paper should be used for general correspondence, half-sized letter heads should be used for short letters, memos, etc. Only the minimum number of copies of letters, notice and bulletins should be made; unwanted extra copies have only to be destroyed later.

11) **Saving on envelopes.** For ordinary purposes, envelopes of smaller size, made of light weight paper should be used. Letters addressed to the same party can be put in a single envelope. Same envelopes can be used again and again for internal correspondence.

12) **Saving on file covers.** Old file folders should be re-used by pasting a slip of paper where the subject and number of the file is written on the cover. Similarly, storage binders can be used again and again. Hard boards and flaps used for tying the files can also be used again and again.

13) **Miscellaneous.** All users should be asked to return unused stationery to the store. Pins and clips should be removed from papers being put in files, such pins and clips can be used again and again. Staplers prove less expensive than pins and clips.

Check Your Progress C

1) What are the following?

   a) Requisition slip (show a specimen of requisition slip)

   b) Dispensing in right packages.

   c) 'Honour System' of issuing stationery.

   d) Scratch pads.

2) Fill in the blanks with appropriate words:

   a) Stationery should be issued at .... times as a routine (all/fixed/odd).

   b) .... system of issue of stationery unnecessarily increase the work of the storekeeper (Fair/Strict/Piecemeal).

   c) The first-in-first-out system of issue means .... stock should be issued first (good/new/old).

   d) .... weight carbon papers should be used for obtaining larger number of-copies. (Heavy/light)

   e) To economise on cost of typewriter ribbons instructions should be issued to use .... colour ribbon (double/triple/single).

3) As office manager what steps will you take to economise consumption of letter heads in your office?

15.12 LET US SUM UP

Stationery and stores should be carefully stored so that they do not deteriorate in quality or get damaged or are not misused.

The basic requirements of a good stock keeping system are that sufficient quantities of stationery should be available when needed, proper care should be taken of items in stock and there should be a proper system of issue.

Proper stock keeping requires that the storeroom should be centrally located and there should be proper physical arrangement of items held in stock. Stocking in shelves should be done in a manner that counting of items is easily possible, and no item should be hidden behind another. Items frequently in demand should be stocked at a convenient place, contents of each package should be marked on its wrapper. When the minimum stock level is reached, order for fresh supplies should be placed. Different items of stationery should be stocked on the basis of some classification. Each shelf should be given a number.

Centralisation and decentralisation of stock keeping have both merits and demerits. Under centralised stock keeping, stationery for the entire organisation is stocked at one place.

Under decentralised stock keeping, stationery required for use in different departments or branches are stored in the respective branches or departments. The advantages of centralised stock keeping are: there is better utilisation of storage space, and stock, and convenience of supervision and control over stock.

The disadvantages are that stationery items have to be re-transported to different departments when required, and there are procedural delays in issue.

Keeping proper record of stationery helps in checking pilferage, controlling consumption, and timely procurement. Record of stationery is maintained in stationery stock register or Stock Card. One of the methods of verifying stock in hand is the process of stock-taking which means physical counting of items lying in stock.

The quantity of stock in hand may be controlled by fixation of maximum and minimum levels of stock, maintenance of perpetual inventory, and listing of inactive items.

Standard procedure should be laid down for systematic issue of stationery. The procedure may consist of issuing stationery on the basis of written requisition, at fixed intervals on specified days, in right quantity and in packets containing a reasonable number of units. The issuing should be recorded in the stock register, and the stationery issued should be delivered at the place of work of the users.

Stationery is costly and its consumption should be properly controlled. Over consumption due to misuse, as well as pilferage, etc. should be checked. To regulate consumption, requirements of each section or branch or department should be properly estimated, and the issue based on requirements. Only responsible persons should be authorised to sign requisition slips. To make heads of departments/branches realise the significance of regulating cost of issued stationery, relevant costs may be charged to the respective departmental or branch-accounts.

Items of stationery should be issued in small packs. Steps should be taken to economise the use of typewriter ribbons, carbon papers, ink, glue and paste, scratch pads, papers, envelopes, file covers, and other items.

15.13   KEY WORDS

Stock taking: physical verification of items lying in stock.

Perpetual Inventory: continuous checking of stock lying in store.

Minimum re-ordering level: The prescribed minimum level of stock of any item which indicates when order for fresh supplies is to be placed.

Requisition slip: A written request for issue of different items of stationery signed by an authorised person.

15.14   ANSWERS TO CHECK YOUR PROGRESS

A 1) a) Re-order level

   b) Centralised storage

   c) Aisles

2) a) , c)

3) i) True, ii) False, iii) False iv) False v) True

B   1) a) Stationery record register

   b) Annual stock taking

   c) Over and under

2) i) True, ii) True, iii) False, iv) True

C   2) (a) fixed, (b) piecemeal, (c) old, (d) light, (e) Single

15.14 TERMINAL QUESTIONS

1) State the importance of storage of stationery. What are the basic factors to be considered for efficient storekeeping?

2) What is meant by centralised storage? What are its advantages and disadvantages?

3) How should the consumption of stationery be controlled? Is it essential to control and regulate the consumption of stationery. Outline a procedure for controlling and regulating the consumption of stationery.

4) How will you maintain record of stationery in an office?

5) What are the different ways of maintaining control over quantity of stock of stationery in hand?

6) Device a suitable system of issue of stationery in an organisation having seven departments and employing eight hundred office workers.

7) Outline the nature and significance of storage of office stationery. What are the important aspects of storage?

8) Write short notes on:

   a) minimum but adequate stocks.

   b) How should stock be arranged in storeroom.

   c) Re-ordering level.

   d) good stock record.

   e) Saving on cost of paper used in office

   f) Proper system of issue of ink, paste, pins, clips and use of carbon papers in offices.

Note: These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

UNIT 16 OFFICE FORMS

Structure

16.0   OBJECTIVES

After reading this unit you should be able to:

- explain the meaning and importance of office forms

- enlist various types of forms used in the offices

- describe the advantages and disadvantages of using forms

- state the objectives of forms control

- outline steps to be taken for forms control

- define continuous stationery

- describe the advantages and disadvantages of continuous stationery.

16.1   INTRODUCTION

Today we cannot think of any office which does not use forms of one kind or the other. Indeed a large variety of forms are used in modern offices e.g. form of application to claim overtime allowance, form of requisition for stationery, forms to acknowledge receipt of orders, making enquiries, etc., order form, bill form, and the like. In this unit we shall discuss the nature and importance of office forms, design of forms, objectives of forms control, and the usefulness of continuous stationery.

16.2   MEANING OF FORM

According to Leffingwell a form is defined as 'a printed piece of paper or cardboard used to collect and transmit information'. Take, for example the form prescribed for claiming travelling allowance by employees. It is printed on a sheet with headings and space for filling in the employees name and designation, date of departure, arrival, and amount, spent, etc., in different columns of the form. Similarly, a form of invoice is a

printed sheet with headings on columns to fill in the quantity, description, rate and amount claimed for goods supplied. Thus, we can say that a form is a printed piece of paper with marked headings under which entries are usually made by hand or typed for the information of other departments.

16.3 IMPORTANCE OF FORMS

It has been estimated that about 68 per cent of the total time spent in office work relates to the handling of forms. Properly designed forms reduce office costs by increasing the volume of work performed. Information required to be collected or instructions to be issued again and again instead of being written everytime, can be filled in blank columns of a form and considerable labour time saved and mistakes avoided. Use of forms in offices have become so common that they have become an integral part of office systems and routines. Use of forms helps information required for efficient conduct of business, to be received, arranged, recorded and transmitted in a systematic manner. For example, forms are prescribed which students seeking admission to any university are required to fill in providing information in different columns and rows of the form. Had mese forms not been there, each student would have written an application by hand, some might have failed to give required information, and some would have given unwanted information. In printed forms, required information can be sought in desired sequence and at desired place, i.e. in specified rows and columns in the form.

16.4 ADVANTAGES OF USING FORMS

The following advantages are derived from the use of forms in the office work.

1) **Saving in labour.** Routine information can be filled in specified columns of forms and there is no need for detailed narration whereby valuable labour and time can be saved. Thus, for routine application to be made, the narration part can be avoided and only facts and figures have to be filled in relevant columns. To acknowledge receipt of a letter, there may be printed post cards in which only the date of receipt and the addresses are to be written or typed.

2) **Mistakes are minimised.** The staff using forms have only to fill in the required information in columns and rows. This minimises the chance of any information being omitted to be furnished or unwanted information being provided. The chances of errors or mistakes are also considerably reduced in that process.

3) **Ease in gathering and analysing information.** When forms are used to collect information relevant data is entered in particular rows or columns according to marked headings. The orderly arrangement of information facilitates the work of data classification, processing and analysis. This reader has only to look at appropriate columns for particular items of data collected, and need not scan the entire form.

4) **Ease in location of records.** Different kinds of forms may be printed in different designs with different headings. Even the size and colour of the paper may be different. This facilitates their location. One can easily find out what information a form contains just by having a look at it. If different categories of information are written in hand, on the similar papers, each form must be read through to know what it is about. For example, with a distinctive form design, the dealing assistant can say that this is medical leave form by just having a look at the form.

5) **Forms facilitate adherence to office procedures and routines.** Adherence to office procedures and routines is facilitated a great deal with the help of forms. Instructions about routines to be followed can be printed on the form as footnotes. For example, if on the requisition slip it is written "signature of Section Officer Store Keeper", "Folio of stock register" etc. it implies that the form should be signed by the Section Officer or storekeeper and entry has been made in the stock register on the specific folio. Forms also help in fixing responsibility for the work done or the work which has remained undone.

6) **Storage of information.** Information about various aspects of activities of the firm remain on record in different types of forms in a definite order, and everybody in the organisation knows about it. This information can be retrieved whenever required by locating relevant forms and looking at appropriate columns.

7) **Better service to customers, shareholders and creditors.** All relevant information about customers, shareholders and creditors can be preserved in different files containing the forms. For example, when customer opens an account in a bank he has to provide complete information about his address, business or profession, referees, in case of need etc. This information can be conveniently found from the forms maintained in files.

8) **Helpful in planning.** Vital information and data which are put in writing in forms can be used for future planning. For example, when deciding about the number of seats to be provided for different courses in any university, the admission forms of previous years can be looked up to find out what courses attract more and better students.

9) **Goodwill.** Forms also help a firm to project respectable image of itself among the general public. For example, those who are issued share certificates in beautifully designed and printed forms are bound to carry a favourable opinion about the standing of the company.

16.5   DISADVANTAGES OF USING FORMS

Although there are many advantages of using forms, there are a few disadvantages as well if proper care is not taken with regard to the design and usage of forms. The disadvantages are as follows:

1) **Information contained in forms is of a routine nature.** Information furnished or required to be given in forms are mostly of a routine nature, which do not serve any purpose in vital matters.

2) **Contain only specified information.** Only specified information is contained in the forms. If there is no column for furnishing any other information, the person filling it will not give it, howsoever, important he may be.

3) **Possibility of excessive use.** Many organisations develop a tendency to use forms for every possible need. For example, if a person wants to avail of casual leave he may have to write two lines on a piece, but some offices unnecessarily have forms for that purpose. This practice increases the number of forms in use, and the office costs.

4) **Possibility of misuse.** There is danger of misuse of office forms if unused blanks are not kept in proper custody. For example if a blank railway pass forms are stolen they can be used to issue fake passes to other people.

5) **Hinders smooth flow of work.** It has been observed that if one or the other form is out of stock, employees in the habit of using forms allows work to be held up for non-availability of forms. This may create serious problems where, for instance, collection of debt gets delayed due to non-issue of reminders on account of the relevant forms being out of stock.

16.6   TYPES OF FORMS

Forms are usually classified according to the work or function for which they are used, e.g. purchase order forms, sales order forms, personnel department forms, acknowledgement forms, cash memo/receipt forms, etc.

Forms may also be classified on the basis of internal or external use. There can be

1) outside contract forms like invoices, purchase orders, credit notes, etc. (See figure 16.1 and 16.2)

2) **internal office forms** like requisition slips, travelling allowance forms, memorandum forms, etc. (See figure 16.3 and 16.4)

Another basis of classification is the number of copies of forms used at a time. Thus, there can be:

1) **single copy forms.** i.e. forms of which only one copy is required at a time

2) **multiple copy forms** i.e. forms to be used in duplicate, triplicate, etc. The additional copies may be required to be sent to different parties or may have to be kept in different files for record.

Figure 16.1

Specimen of Purchase Order
PURCHASE ORDER

To

_____   Date _____

_____   Requisition No. _____
(Name and address of supplier)

Please supply the following items in accordance with the terms and conditions herein.

Item No.	Description	Quantity	Code No.	Price	Total	Remarks

Figure 16.2

Invoice

Book Lovers Private Limited Hyderabad			
No. 3891			Date: 15.7.1987
To M/S. Book Paradise, Nagpur			

Quantity	Particulars	Rate per unit	Total
		Rs.	Rs.
10 Copies	Principles and practice of Accountancy by R. Sriram	25.00	250.00
	Less: Discount @ 10%		25.00
	(Rupees two hundred and twenty five only)		225.00

xxxxx

For Book Lovers Private Limited

Figure 16.3

STORE REQUISITION SLIP

Sl. No.	Particulars of items required	Quantity required	Quantity issued	REMARKS

Received Above Items

Signature of the Indentor   Signature of the PVC/ Sectional Head   Signature of Stores Incharge

Figure 16.4

ADJUSTMENT BILL

Maintenance Account
Development Account
Earmarked Found Accounts
Deposit Account

A sum of Rs. .... was taken as advance on ....
by .... Out of this advance a sum of Rs. .... has been spent as per the following vouchers (Enclosed).

Vouchers No. Date	Name of the Firm	Items purchased etc.	Amount Rs. P.

The unspent balance of Rs. .... has been deposited in the Finance Branch vide Receipt No. .... dated ....

An additional amount of Rs. .... has been spent by Shri .... on the purchase of the above items. This amount may please be reimbursed to Sh. ....
.... and charged to the Budget Grant for the year .... under the Head
....

Date: Dy. Registrar/Asstt. Registrar

Delete whichever is not applicable

(For use in the Finance & Accounts)

Passed for adjustment/Payment	No. Payment
of Rs.	or
(Rs.	Rs. ....
....	paid in cash/by cheque
	Date:

Check Your Progress A

1) How do forms help in saving labour time?

2) Give an example of excessive use of forms.

3) How can the forms be misused? Give two examples.

16.7   FORMS DESIGN

Designing an office form is a very important aspect of office management. A badly designed form may cause waste of labour and mistakes in clerical work. It may lead to boredom, monotony and frustration among the staff. Also such a form may adversely affect goodwill and public image of the organisation. Any defect in the design of a form can ruin good systems and procedures.

16.7.1 Factors Affecting Forms Design

The following factors should be kept in view while designing the office forms:

1) **Suited to the purpose.** While designing a form its purpose should be carefully defined both in relation to its use and office routines. Due consideration must be given to the nature and type of information of form. There can be no justification for getting a form printed if an ordinary piece of paper can serve the purpose well. Use of the form should expedite work and save time and energy.

2) **Convenient to use.** The design of the form should be convenient to use, depending on the manner in which it is to be used, i.e. how the form will be filled, whether by hand, by typewriter or by accounting machine. For example, if a form is to be fed into a typewriter it should be so designed that new starting places for the typist are minimum. Similarly, spacing between the lines should according to spacing provided in the typewriter.

   Attention should be given to the arrangement and sequence of items to be recorded on the form. A logical sequence should be followed so that each item can be entered with convenience. Related information should be bunched together. For example, the name and address of a customer should be entered at one place. The user should not have to look for related information at different place in the form.

3) **Simple to use.** The design should be such that users can easily learn its use. Key information should be put at a prominent place so that sorting can be done by merely having a look at the form. For example, the account number of the customer

on the specimen card should be given at the top so that it can be easily located. The headings of columns should be self-explanatory; abbreviations or symbols should be avoided. If adequate instructions are lengthy, these may be printed at the back of the form. The instructions should be clearly worded.

Generally, a form will have three parts: (a) **Identification**—The first part is for identification, with the name, address, number, etc. of the party/correspondent. The identification information should be at the top of the form. (b) **Main information or data**—The second part is meant for filling in the data or information. (c) **Special instruction**—The third part is left for special instructions. For example, a purchase order form may contain a column whether the goods are to be sent by road or rail, etc.

4) **Heading and code number of the form.** For easy identification, every form should bear a heading or a code number. It is easier to refer to forms by the headings, which should be printed at the top of the form. Use of alphabetical codes to identify forms is often preferred. For example, alphabet 'A' may stand for accounts section, 'P' for purchase department, 'S' for sales department, etc. Form S-5 may suggest that it is a form used by the sales department. Instead of headings, serial numbers may only be assigned to the forms using the decimal system. For example, No. 3.27 may be allotted to a form indicating that relates to the sales department of which the code No. is 3, the serial number of the form being 27.

5) **Proper size.** The form should be just large enough to accommodate the matter to be written on it. Paper cut to standard sizes is available in the market; the size of the form should be such that there is minimum wastage of paper in the process of cutting it again to the size of the form.

The following points should be borne in mind while deciding about the space to be left for filling in information or data in the column or cages of the forms.

i) Column should be broad enough to accommodate maximum words/figures likely to be filled in it.

ii) Column should be long enough to accommodate a fixed number of entries and if entries are lengthy one column should be capable of accommodating one entry at least.

iii) The heading of each column should be brief and concise but self-explanatory.

6) **Proper printing.** If forms are printed, the **type face** should be distinct and clear, and big enough to be readable in natural or artificial light. From the point of view of get up, different kinds of type faces may be used. While checking proofs of printed forms it should also be ensured that the copy is correctly composed and properly laid out.

7) **Selecting paper of appropriate quality.** Forms should be printed on paper of appropriate quality, i.e., weight, fineness, colour etc. of the paper.

The quality of paper to be used for different forms will depend on the following factors:

i) **Durability.** The paper used for printing forms should be strong enough to last for a specific period. Some forms like share certificates, academic degrees, insurance policies, etc. have to be preserved for long periods and paper used for printing such forms should be durable.

ii) **Handling.** Handling refers to repeated use of filled in forms and frequently passing from hand to hand and exposure to wear and tear. Forms likely to be subject to rough handling by different persons should be printed on strong paper. Printing of forms required for temporary use on quality paper is a waste of money.

iii) **Method of filling in the form.** The quality of paper should be selected keeping in view whether the form is to be written by hand, or **typed or fed into some** other type of machine. If carbon copies are required the form should be printed on thin paper. Special type of paper has to be used for getting cyclostyled copies of the form.

iv) **Appearance.** A form intended to be used for communication with outsiders, should be printed on good quality paper (like bond paper) so as to make good impression on the receivers. The appearance of share certificate has to be good. Forms required temporarily for record only, like a pay-in-slip of a bank, need not be printed on very good quality paper.

8) **Use of colours in printing.** Unless essential, the forms should not be printed in different colours of ink, because the related costs are likely to be high. However, some forms may be printed in a particular colour of ink, for example, a credit note is conventionally printed in red ink. Sometimes, papers of different colours are used for printing different types of forms. For example, the white paper may be used for original copy, pink for the second, and light green for the third copy.

9) **Providing space for punching or perforating and scoring.** For convenience of use, forms are usually stitched and kept as bound books. In that case, necessary space should be left for stitching. Besides, forms are invariably placed in files for which perforations are required to be made on the left hand margin. Sufficient margin is, therefore, provided on the forms for that purpose as well. Some forms are provided with detachable parts. For example the lower part of share application form is used for acknowledgement of receipt. To facilitate detachment, **performation** are made while printing the forms for which the printer should be given clear instructions.

Scoring means impressing a line on the paper which indicates the place where the forms may be folded and cross-folded. Printer must also be instructed about the exact place on the form where scoring lines are required.

16.7.2 Principles of Forms Design

The following principles which provide useful guidelines for designing forms are worth noting:

1) **Principle of use.** Forms should be easy and simple to use. They should facilitate efficient performance of work rather than become obstacles to smooth flow of work. Forms should be used only when it is essential to do so, i.e. when it helps saving of time and labour. Use of forms, for example, is essential when certain date has to be reported repeatedly.

2) **Principle of standardisation.** Standard designs for every type of form should be determined and maintained. This implies that forms should always be printed on paper of the same size, quality and colour and using the same type of print so that different forms can be identified easily.

3) **Principle of centralised control.** Effective control is essential over introduction of new forms, making changes in old forms, and discontinuation of obsolete forms. There should be a central authority designated for the purpose. In the absence of a central authority, introduction of new forms and amendments to the existing forms are likely to be arbitrary and unsystematic.

4) **Principle of integration with office systems and procedure.** Forms should facilitate adherence to systems and procedures prevalent in the organisation. Use of forms should not obstruct or delay the flow of work. For example, if a requisition form for stationery has to be signed by assistant manager and the form has a space provided for "signatures of the manager". It may lead to unnecessary conflict and misunderstanding.

5) **Principle of multiple use.** Efforts should be made to make one form capable of being put to different uses. This helps in restricting the number of forms in use. Existence of a large number of forms hinders work and becomes uneconomical

Check Your Progress B

1) Design a form for claiming travelling allowance.

2) When are forms difficult to understand and use?

3) Why should every form be given a name or a number?

4) Tick mark the factors which are to be considered while selecting the appropriate quality of paper for forms:

a) Number of copies to be made.

b) Size of the form.

c) Colour of the form.

d) Intensity of handling it has to bear.

e) Longivity.

f) How it is going to be transported.

g) Method of writing on the form.

h) How much space is to be left for punching or perforation.

i) Principle of multiple use.

5) Give an example of a form being used for more than one purpose.

16.8 FORMS CONTROL

To maintain smooth flow of work, performance of office work in accordance with the system is laid down, and io economise on expenditure on forms, control over office forms is essential. **Forms control refers to maintaining a check on introduction of new forms, amendments in existing forms and discontinuation of obsolete forms.** Without forms control there may not be any end to multiplicity of forms and arbitrary amendments to the existing forms.

16.8.1 Objectives of Forms Control

The primary objectives of forms control are as follows:

1) **Retention of necessary forms only.** To retain only those forms which are necessary for saving labour and time.

2) **Suitable design of forms.** To ensure that the forms being used in the organisation are appropriately designed.

3) **To produce forms economically.** The number of forms to be printed must be in lots which is economical from the point of view of printing cost and possibility of modifications.

4) **To prevent misuse of forms.** To ensure that forms are distributed only to the staff who need them and not reach wrong hands.

5) **Reviewing existing forms.** To periodically review the existing forms to check whether they are still in line with current systems and procedures of work in the office.

6) **Introducing new forms or amending old forms.** To ensure that new forms are not unnecessarily introduced, and existing forms are not amended without justification.

16.8.2 Steps in Forms Control

The following steps are considered to be useful for making forms control effective.

1) **Establishing a centralised administration.** For effectiveness of control, it is necessary that the controlling authority should be vested in the office manager or a senior officer. Generally, a centralised control system is preferred in large organisations. Sometimes a "forms supervisor" is appointed to assist the office manager. A committee may also be set up to advise the office manager as regards introduction of new forms, designing forms, amendment of existing forms, and management and control of forms general.

2) **Approving design and printing.** If the controlling authority approves the introduction of a new form, the next step is to have a suitable design of the form.

   After preparation and approval of the design comes the task of producing the form; it may be cyclostyled or printed, taking into account (i) the number of copies of the form to be produced, (ii) quality of paper to be used, and (iii) size of the form.

3) **Maintenance of forms register.** To keep a permanent record of forms being used in the organisation a "Forms Register" is usually maintained in the office. Two copies of every form are pasted in the forms register. A separate index or list of all forms contained in the register is also maintained to facilitate ready reference.

4) **Preparing list of office procedures and routines.** Forms are tools through which office routines and procedures are followed. The forms controlling officer should get details of all procedures and routines being followed in the organisation. The forms should be classified, marked and numbered according to the procedure and the concerned department. For examples, a 'Purchase order form' used by the Purchase department as a part of purchase procedure, can be classified under the forms of purchase department.

5) **Periodic review.** All existing forms should be periodically reviewed to check whether they need amendment, or can be eliminated, or combined with other forms. Use of some forms may have to be reconsidered in the light of copies to be prepared to meet the requirements of a new procedure, additional copies being sent to other departments, or filled for future reference.

   A form which is no longer is used has to be disposed of, but before doing so, concurrence of the head of the user department should be obtained in writing. The fact that a form has been declared dead should be noted in all relevant records.

6) **Determining quantity to be ordered.** The controlling authority has to determine the quantity of the forms to be ordered at a time. The order quantity should neither be too small nor too large. If the forms are produced in very small quantities they may be exhausted soon, and fresh order for supply may have to be placed. This may obstruct flow of work and involve extra expenditure on fresh printing. If order is placed for too large a quantity, there are chances of the forms becoming damaged or obsolete over time. When deciding about the quantity of the forms to be ordered at one time, the following factors should be taken into account.

   a) average quantity used per month or fortnight;

   b) time required to procure fresh supply;

   c) cost of forms and funds to be invested for the purpose;

   d) savings which can be effected if supplies are procured in large quantities;

   e) possibility of charges being made in the forms.

   Considering the above factors a cost **and a benefit** analysis should be made and an exact figure for quantity of **forms to be ordered** at a time be fixed. The following formula may be applied to determine the economic order quantity (EOQ) to be ordered.

   $$EOQ = \sqrt{\frac{2\,AS}{i\,C}}$$

   Where:

   A = Annual consumption

   S = Ordering costs per order

   C = Invoice cost of each form

   i = Carrying cost of forms expressed as a ratio of the invoice price of forms

Check Your Progress C

1) Enumerate any three objectives of forms control

2) Why should a centralised administration be established for control of forms?

3) What factors will you consider for periodic review of forms being used in the office?

4) What factors are missing from the list of factors to be considered for determining quantity of forms to be ordered:

i) Possibility of change in forms.

ii) Amount of money required to be invested in forms.

iii) Savings likely to be effected in bulk procurement of forms.

iv) ....

v) ....

16.9 CONTINUOUS STATIONERY

If more than two copies of any form are to be prepared, the typing work is likely to be cumbersome and time consuming. For example, if a typist has to prepare four copies of a form he will have to place four forms, one being the other, in proper alignment, put carbon papers in between them, and insert them in the typewriter properly. After typing, he will have to separate the forms and the carbon papers. This work of interleaving, handling, aligning and detaching, may take more time than the actual typing.

To avoid this inconvenience, continuous stationery is now widely used. This implies arranging readymade, properly aligned sets of forms with single-use carbon papers placed in between. The typist has only to insert a readymade set of forms in his typewriter and start typing. In the case of roll stationery the feeding is done once only. When a set has been typed, the next set gets automatically fed into the typewriter from the roll.

Continuous stationery may be defined as a device whereby office forms are produced in continuous strip, and where separate forms are usually divided from one another by perforation, and where several copies are usually obtained by the use of various copying methods.

16.9.1 Types of Continuous Stationery

Different varieties of continuous stationery are now available in the market. Mainly used are the following:

1) **Roll Stationery :** In this type of stationer the forms are wrapped in continuous rolls. You may have seen rolls of paper used in a computer, or a listing machine or calculator, computerised railway booking where forms of tickets are fed into the machine in rolls. One form is separated from another by means of perforations. In some types of rolls, forms have to be separated from each other with the help of a metal cutting edge. There is no provision of production of multiple copies in roll stationery.

2) **Interfold stationery.** In this type of continuous stationery, forms are interleaved and folded flat in 'concertina' fashion with perforations for easy detachment.

Figure 16.5: Continuous Stationery Fanfold

3) **Fanfold type.** In this type of continuous stationery, separate copies of forms are joined together not only end to end, but also side to side. The forms are detached from one another by perforations both horizontally are vertically. If a number of sets of this type of stationery are pulled out, they open up in the form of a fan and that is why it is called fanfold stationery. The forms are interleaved with single-use carbon papers.

This is special type of ontituous stationery having forms of different with incorporated in a set, or having pre-punched filing holes in forms. But it prevents the use of sprocket frrding. In sprocket feeding system, the edges of the roller of typewriters have wheels with protruding pins. These scts of forms have holes whic fit into the sprocket so that result they do not get out of the alignment when rolled over.

16.9.2 Advantages of Continuous Stationery

Use of continuous stationery offers the following advantages:

1) **Saving in time.** Assembling and aligning multiple copies of forms interleaving them with carbon papers, and detaching them taken together is a laborious and boring job. The main advantage of using continuous stationery is the saving in time along with the elimination of monotony. Larger the number of copies of a form to be produced, more is the saving in time.

2) **Better quality of work.** Work done through continuous stationery is neat and clean. There is little chance of figure on the second or third copy having impressions at wrong places due to faulty alignment.

Disadvantages of Continuing Stationery

Following are the disadvantages of using continuous stationery:

1) **Corrections difficult.** When forms are used in sets, it is difficult to make corrections and alterations in the typed forms. If five or six copies of any form are typed by single stroke, corrections are still more difficult.

2) **Carbon paper spots.** Carbon copies of forms often get spoiled as spots of carbon papers appear due to the pressure of the roller of typewriter on carbon paper.

3) **Defect in alignment.** If due to faulty manufacture, the alignment of forms in a set gets disturbed, imprints are likely to be at wrong places.

4) **High initial cost.** Installation of continuous stationery involves high initial cost. The cost of interfold or fanfold forms with single use carbon papers interleaved in them is quite high. Only big undertakings can afford such costs and derive their benefits. With the availability of xeroxing or photocopying facilities many firms wave discontinued the use of continuous stationery. When several copies of a form are required photocopies can be conveniently obtained.

Check Your Progress D

1) State whether the following statement is true. If not, what is the fallacy in it?

"By continuous stationery we mean a position when office stationery is available to employees continuously, without any shortage or interruption"

2) Which of the following two statements is correct and why?

a) "Continuous stationery is used to fill information in forms continuously without separating or detaching them."

b) "Continuous stationery is used to save the labour of aligning a number of forms, interleaving them with carbon papers time and again."

3) Which of the following is not a types of continuous stationery?

a) Manifold

b) Interfold

c) Fanfold

d) Roll stationery

e) Wrapfold

4) Which of the following statements are true and which are false?

a) Continuous stationery installation involves high initial cost.

b) Use of continuous stationery results in saving of time and labour which leads to saving in office costs.

c) Work done by use of continuous stationery is neat and clean :

d) Single use carbon paper used in between a set of forms in continuous stationery leave spots on lower copies

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16.10   LET US SUM UP

Use of forms is a must in every modern office of medium or large size. A form is a printed piece of paper or card on which required information is entered in ccolumns and rows.

A significant proportion of the work time of office ,employees' is spent in handling forms, either reading forms of filling forms. Indeed forms have become an integral part of office routines. Use of forms expedites work result in saving of labour time, minimises errors, facililates collection and analysis Information. It also helps location of records and adherence to office procedures and routines. Forms facilitate in storage of information, help in providing efficient service to customers, and create goodwill of the enterprise.

Forms can provide only specified information, nothing beyond that. There is a always the danger of excessive use forms. Sometimes they hinder smooth flow of work by increasing red-tape.

Forms can be classified on the basis of work or function for which they are used, Office forms should be properly designed. The design should be suited to the purpose for which a form used. Forms should be simple to use, must have heading or title and a number. There must be adequare space in the forms the writing one matter and the size of forms must also be used. The quality of paper will depend on how important the forms are, the period be used. The quality of paper will depend on how important the forms are, the period of preserving them, handling they have to bear and the method of writing. Forms must have space for punching holes, perforation and scoring. There should be centralised control over introduction of new forms and taking amendments in existing forms.

It is essential to maintain control over the production and use of office forms. The objectives of forms controls are ensure that forms are designed property, and to review existing forms periodcally to climate obsolete. Control is also necessary to prevent misuse of forms.

For effective control, it is necessary that the controlling authority vested in the office manager or a senior executive. A centralised system of contrl is prepared in large organisations. A committee may also be appointed to advice the office manager on various aspects of control. A list of office procedures and routines should be prepared to examine the feasibility of Introducing new forms or amending existing forms. The forms in use should be periodically reviewed. The quantily of forms to be produced at a time should be determined carcfully.

Continuous stationary is a device whereby office forms are produced in continuous strip and where several copies are obtained using various copying devices. It is of three types: 1) roll stationery, ii) interfold stationary, and iii) fanfold. Continuous stationery saves labour time and better quality of work is also achieved.

Disadvantages of using continuous stationery are that it is more costly, making corrections in forms is difficult, and forms get spoiled by spots caused by carbon papers. Defect in alignment of forms can result in figures being imprinted at wrong places on carbon copies, which may be confusing.

16.11   KEY WORDS

Form : A printed piece of paper or card on which entries are mode against marked headings.

Continuous Stafioneryy : A device whereby office forms are produced in continuous strip, one set of forms is separated from another be preforations, and several copies can be obtained by using various copying methods.

16.12 ANSWERS TO CHECK YOUR PROGRESS

B   4)   Correct factors are : (a), (d), (e), (g), only.

C   4)   (iv) Quantity used per month, fortnight, etc.

           (v) Time required to procure fresh supplies.

D   1)   The statement is false.

     2)   Statement (b) is correct.

     3)   (a) and (e) are not any type of continuous stationery.

     4)   a (True), b (True), c (True), d (True)

16.13   TERMINAL QUESTIONS

1)   What is meant by office forms? What 's their significance? State the principles of forms designing.

2)   What are the different types of forms used in offices? State the advantages and disadvantages of using office forms.

3)   What are the objectives of forms control? Briefly enumerate the steps necessary for effective forms control.

4)   What factors will you take into account when determining the quantity to be ordered at a time for supply of office forms.

5)   Forms control has been referred to as "one of the essential tools of office management". What do you understand by forms control? State how you will initiate a system of forms control in an organisation with which you are familiar and enumerate the benefits you would expect from it.

6)   What do you understand by "continuous stationery"? What purpose does it serve? State the advantages of using continuous stationery in a modern office.

7)   As an office manager, how could you ensure the rationale of using forms in your office?

Note: These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University. These are for your practice only.

SOME USEFUL BOOKS

1)   Chopra R.K. *Office Organisation and Management* (1989). Himalaya Publishing House: New Delhi (Chapter 10, 12).

2)   Gupta C.B. *Office Organisation and Management* (1990). Sultan Chand and Sons: New Delhi (Chapter 9, 10)

3)   Rao V.S.P. and Narayana P.S. *Office Management* (1987). Tata McGraw-Hill Publishing Company Ltd.: New Delhi (Chapter 13, 14).

Block

5

OFFICE SUPERVISION

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BLOCK 5 : OFFICE SUPERVISION

Having discussed the fundamentals of modern office management, maintenance and mail services, date processing, stationery and forms management in the preceding four blocks, it is felt necessary to delve into the various aspects of office supervision. This block, consisting of four units, deals with the role of office supervisor, the concepts of work measurement and standardisation and the importance of personnel relations in an office.

Unit 17 deals with the role and qualities of an office supervisor, essentials of offi supervision and the role of human relations in office supervision.

Unit 18 describes the importance and techniques of work measurement and methods applied for setting standards in a modern office.

Unit 19 discusses the issues related to work simplification in an office

Unit 20 deals with the role of personnel relations in efficient functioning of an office.

UNIT 17 OFFICE SUPERVISOR

Structure

17.0 OBJECTIVES

After studying this unit, you should be able to :

- explain the meaning of office supervision
- outline the special features of office supervision
- distinguish between the position of the office manager and the office supervisor
- describe duties and responsibilities of the office supervisor
- explain how office supervision can be made effective
- explain the importance of human relations in office supervision.

17.1 INTRODUCTION

You have learnt about various aspects of office organisation and management. You have also been acquainted with the office systems and procedures relating to various office functions as well as the use of machines to achieve business objectives efficiently. With congenial environment in the office and given well-designed systems and procedures, the efficiency of office operations depends largely on the office employees who carry out the activities of the office. To ensure that the employees perform their work in accordance with the systems and procedures laid down, it is necessary that somebody should oversee the day to day work being performed. Otherwise, the flow of the work may slow down, or the quality of the work done may suffer due to over-speeding. All this may lead to waste of time and effort and inefficiency of office functions affecting the growth and development of business. It is, therefore, essential that some members of the office staff are engaged to oversee the work carried out by the others. Such persons are known as the office supervisors. In this unit, we shall explain the meaning of office supervision, the role of the office supervisors, the essentials of effective supervision, and the importance of human relations in office supervision.

17.2 WHAT IS SUPERVISION ?

In every business firm, the management decides as to what activities are to be carried out and how they are to be performed. Micro level specialisation of jobs and unity of such specialised tasks into a system require group effort. Where group effort is required, there remains the viral task of ensuring that the work is actually carried our efficiently and on time. This task is known as supervision. Thus, supervision is essential for any group effort to achieve the organisational objective. In simple terms, supervision means overseeing the employees at work. It is a process wherein an individual directs and controls the work of others. The main purpose of supervision is to ensure that the workers perform the assigned work properly and efficiently.

17.3 MEANING OF OFFICE SUPERVISION

Supervision implies overseeing the subordiantes to work to ensure that they are working efficiently and effectively and in accordance with the established rules and procedures. Application of the principles and practices involved in supervision to office activities is known as "Office Supervision."

At the supervisory level in the office, the general orders and directives originating from the office manager and/or from above are translated into action. Reports are prepared, and typed, letters are filed, meetings are arranged,visitors are received, tax returns are prepared, and similar activities carried out. Quality of output to a very large extent depends upon the quality of office supervision. Faults or lapses in supervision can create many hindrances in the smooth implementation of policies and programmes. In the absence of supervision, each employee may do what he or she likes in a manner convenient to him or her, the objectives of the group. The significance of office supervision has been recognised, all the more due to the complexities of office work. A new entrant with paper qualifications cannot pick up elements of office work through observation. What he needs is a constant guidance, direction and motivation to learn, and to perform the work efficiently. The office supervision enables the employees to feel at home and perform their job as desired.

Office supervision enables performance of office activities in a co-ordinated manner. Office work has become increasingly more specialised and, along with divided responsibilities and interdependence, calls for careful supervision for better output, be it preparation of reports, or invoicing or drafting letters. Office supervision also enables harmonious personnel relations to be maintained in the entire organisation. Office work being related with various functional departments, interaction between interdependent employees is a must. Thus, supervisory management plays a key role as a 'linking pin in the organisation.

Features Of Office Supervision

Like supervision of work in any other department of an organisation, office supervision too has three main features. These are as follows :

a) *Office supervision is a continuous function.* Employees working in an office are to be directed, guided, motivated on a continuous basis for better performance. As first line managers overseeing office activities, the supervisors are in constant touch with the office employees, guiding and directing them in their day to day work

b) *Office supervision is a delegated function.* The power or authority enjoyed by a supervisor is delegated by the higher levels of management. In an office, the office manager delegates his authority to the supervisor to direct the office

employees in the operation assigned to them. Such delegation permits the office supervisor to act independently and with responsibility in accordance with the authority granted. However, authority oncedelegated can be withdrawn, if it is found that such authority is either being misused or not being used. Although supervision is a delegated function, the true nature of supervision is that it involves both authority and responsibility for the work of the other employees.

c) *Office supervision is first level management.* Supervision comes at first level in the hierarchy of management. The position of the supervisor lies between the office manager and the office employees. The supervisor acts as a link between the planning and implementation personnel. He helps in achieving organisational objectives through action with the help of his subordinates. He also communicates the policies of higher level management to operative personnel and the problems of operative personnel to higher management. The office supervisor acts as a linking pin between the office employees and the office manager, that is, the middle level management personnel. The supervisor as the first level manager has first hand information about the progress of the work and ensures completion of the work on time.

Check Your Progress A

1   Define supervision

....

....

....

....

2   What do you understand by office supervision ?

....

....

....

....

3   Which of the following statements are True and which are False ?

   i)   Office supervision is first level management.

   ii) Authority is delegated by top management to the office supervisor.

   iii) The office supervisor is a "linking pin" between the office operatives and the office manager.

   iv) Office employees are occasionally directed, guided and motivated in their work by the supervisor.

   v)   In the absence of supervision, office employees may do their work properly if they are well-trained

17.4 OFFICE MANAGER AND OFFICE SUPERVISOR

The office manager is the head of the office and is in-charge of general administration of the office. In a small office, the manager, in addition to general administration, also undertakes the work of supervision. However, in a large organisation, he has usually one or more persons appointed as supervisors. The office manager then is required to perform the overall managerial functions of planning, organising, staffing, directing and controlling the office activities. He is

expected to motivate persons working under him for better output and higher efficiency. He reports either to the Company Secretary or the General Manager. He takes part in the formulation of the policies and procedures. He may also attend the Board meetings. The office supervisor, on the other hand, is comcerned with guiding and directing the day to day work assigned to his subordinates. He checks the performance of the subordinates and co-ordinates group activities and resolyes the problems relating to routine operations. The supervisor receives instructions and orders from the office manager. The diagram below shows the position of the supervisors and the office manager.
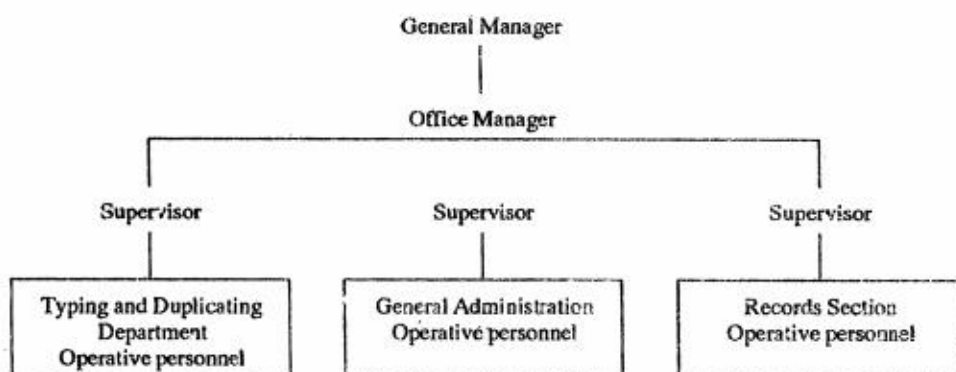
Figure 17.1 Position of the Office Manager and the Office Supervisor

In this diagram we see that the office supervisor occupies a very delicate but important position in the organisation structure of the office. Almost every plan and policy must pass through him for implementation. He is responsible for getting the work done efficiently by the office staff. He is an important link in the chain of command, as well as, in the line of communication between the office manager, and the office operatives. The office manager, on the other hand, acts as a link between the higher level managers, as well as, heads of the functional departments and the office supervisors. He bears overall responsibility of making office services available to all other departments as efficiently as possible.

17.5 ROLE OF OFFICE SUPERVISOR

In fact, the office supervisor is a first level manager at the actual work spot. He is responsible for issuing 'orders', directing, guiding, motivating and leading his/her subordinates in the day to day performance of office tasks. In other words, he is a key figure in managing office work. One can safely say that an organisational unit is large because of the supervisor's role. Most of the problems arising on the office floor are resolved instantly by the supervisor himself/herself. Where the supervisor is competent he gets full cooperation and support from his subordinates. He is also the person responsible for creating a conducive office environment to achieve the desired objectives efficiently.

The supervisor's role is sometimes a difficult one to manage. On the one hand, being a first level manager, he is separated from the men he supervises. They do not consider the supervisor to be one of them. He may even face resentment if he is too strict. At the same time, the subordinates consider the supervisor to be their spokesperson, and expect him to protect them from all unfavourable decisions of the higher level managers. On the other hand, because of his lower rank, he is separated from the higher level managers while he is expected to secure the cooperation of his subordinates in achieving the maximum output at the minimum cost. As a result, the supervisor has often to bear the pressure from both the management and the employee union. Consequently, he is quite often the target of attack from both sides. The situation is now changing for the better with greater

awareness of the nature of the supervisory job. In modern business/enterprises and commercial establishments, the supervisor's role has been redefined and reinforced. He is recognised as a source of work-knowledge to the worker and the work-group. He is even considered as the fountain-head of technical knowledge and information, and a channel of information flow to and from various experts to the workers and the work- group. Viewed from this angle, it becomes quite clear that a supervisor has an important role to play in the present day set up of an organisation unit.

17.5.1 Duties

It has been mentioned earlier that supervision is primarily a delegated function and, as such, the supervisor's role, by and large, depends on the organisational set up and the position he enjoys in the authority structure. For instance, in a small unit the office manager and the supervisor may be one and the same person, while in a large enterprises the supervisor may have limited authority of directing the subordinates under the overall administrative authority of the office manager.

In a limited way and to the extent required for executing his tasks, a supervisor is required to perform managerial functions like planning, organising, and controlling, besides directing and motivating.

The following are the more important duties of the office supervisors:

a) To set targets of output of work;

b) To schedule work so as to maintain an even and steady flow;

c) To organise physical conditions in the office so as to create proper environment;

d) To interpret organisational policies and programmes;

e) To watch for innovations in techniques and methods of work in other organisations;

f) To bring about changes in methods and equipments;

g) To establish systems and procedures for office activities;

h) To provide congenial work atmosphere;

i) To assign work to different office assistants according to their abilities·

j) To provide leadership to the subordinates;

k) To control work performance of the office employees;

l) To evaluate the merit of the employees on the basis of their performance;

m) To enforce discipline;

n) To motivate the office employees in his unit;

o) To establish proper authority relationship among members of the work- group;

p) To initiate corrective steps, where necessary, to improve work performance.

17.5.2 Responsibilities

The responsibility of the supervisor may relate to his (a) superiors (b) subordinates and (c) fellow supervisors, as outlined below;

a) *Responsibility towards superiors:*

   i) to carry out what the supervisors desire and as laid down in the plans and policies,

   ii) to keep his superiors well informed about the progress of the work done

in the office;

iii) to refer matters requiring the superior's attention;

iv) to ensure that work is performed as per the standard methods and procedures laid down;

v) to co-ordinate the work of his unit with that of the other units.

b) *Responsibility towards subordinates:*

i) To educate new workers by familiarising them with the office rules and regulations;

ii) To train new and existing members to assume greater responsibilities;

iii) To develop harmony, co-operation and team spirit;

iv) To help his subordinates in resolving conflicts;

v) To evaluate members of the work-group impartially;

vi) To establish better human relationship;

vii) To build and sustain the employees' morale and to handle the employees' grievances promptly;

viii) To protect the subordinates from undue exploitation;

ix) To bring about changes in the methods and procedures with the minimum hardship to the subordinates.

c) *Responsibility towards his fellow supervisors*

i) To help co-ordinate the work of his own work-unit with that of the others,

ii) To co-operate with fellow supervisors in the same way that he expects his subordinates to co-operate with each other.

iii) To study, develop and use new methods in consultation with other supervisors.

17.6 QUALITIES OF OFFICE SUPERVISOR

To perform his functions efficiently and shoulder his responsibilities, the office supervisor must possess the basic knowledge and skills, as well as, the requisite abilities. The knowledge and skills required for proper supervision of work differ from organisation to organisation. However, ability to perform the supervisory job well requires the minimum education, training, and experience. The office supervisor must have the following educational and general qualifications to be effective:

Must have sound knowledge of office functions: Sound knowledge does not only mean knowledge that goes with a university degree but also in-depth knowledge of various office activities, acquaintance with the types of machines and materials used, and the methods and procedures laid down for performing specific jobs. He will be able to direct and guide the members of the work-group properly only if he is fully acquainted with the methods and procedures laid down for various jobs.

Awareness of rules, regulations, authority and responsibility: The supervisor must be aware of organisational rules and regulations, the extent of his authority and responsibility, and the matters on which he can take decisions. Not only should he be aware of the rules and regulations but he should also act accordingly.

Communication skill: Ability to communicate with his superiors and subordinates effectively, is an important aspect of supervisory work. The job involves issuing instructions to the subordinates and reporting to the supervisors. The subordinates

wil! take greater interest in their work only when they are clearly informed about the nature of the work and the methods to be followed. Similarly, management will be in a position to guide only when they are regularly informed about work performance.

Leadership qualities: A supervisor should possess leadership qualities which include ability to get along with the subordinates and securing their co-operation. As a leader of his work-group, the supervisor has to guide the subordinates and promote harmonious relationship among them. The ability to treat his subordinates as human beings, to generate mutual respect and understanding, to secure trust and co-operation without any coercion, are some of the essential qualities that the supervisor should possess to be effective as a leader.

Personal Qualities

A good supervisor is expected to have the following qualities with regard to his conduct and behaviour :

1 He should be punctual;

2 He must be self-disciplined

3 He should be alert so as to be able to take note of irregularities in work performance;

4 He should take timely decisions;

5 He should adopt a human approach to solve human problems;

6 He must have integrity of character and a strong personality;

7 He must avoid giving a sense of inferiority to his subordinates:

8 He should deal with the subordinates with sympathy and understanding.

Check Your Progress B

1 Which of the following statements are True and which are False ?

   i) The office manager may undertake the work of supervision in small offices only.

   ii) In a large organisation, the office supervisor has nothing to do with the office manager.

   iii) The supervisor is never liked by his subordinates.

   iv) The plans and policies of the higher level managers are implemented by the office supervisor.

   v) The office supervisor cannot take any decision even in matter relating to day to day work of his subordinates.

   vi) Within the limits of his authority, the supervisor can plan and prepare the work schedule of the jobs of the employees.

   vii) The supervisor does not have the power to establish systems and procedures of routine operations in the office.

   viii) An office supervisor has no responsibility towards fellow supervisors.

   ix) It is possible for the supervisor to enforce discipline as well as maintain harmonious relationship among the subordinates.

   x) Integrity of character is a quality of every good supervisor.

2 List five personal qualities of a good supervisor.

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17.7   EFFECTIVE SUPERVISION

Effectiveness of supervision implies achieving the objectives of the supervision to the maximum degree. To be effective, the supervisor must be able to guide, direct and motivate his subordinates and secure the maximum co-operation from them in their day to day performance of the office work. For this purpose the office supervisor should keep in view the following requisites of effective supervision:

1   *Operate objectively.* The supervisor should perform his duties and act on the basis of facts. In other words, his personal likes and dislikes should not influence his decisions and actions as a supervisor. He should assign work on the basis of abilities and evaluate the performance of the workers on the basis of objective standards and measures of work.

2   *Adopt participative style.* To secure full co-operation of his work-team, the supervisor should allow his group to discuss fully any problem concerning their work, and invite their suggestions to improve. He should make suggestions and carry them along with him to achieve higher objectives.

3   *Enforce rules and regulations.* The supervisor should be strict and impartial in enforcing organisational rules and regulations. If he is slack in the enforcement of rules, etc., he will be regarded as inefficient and incompetent to cope with the situation.

4   *Use simple language in communication.* The supervisors should issue clear instructions to the subordinates. The language used should be simple and easily understandable. Words having double meaning should be avoided.

5   *Reduce waste and check on output*   Maintaining satisfactory outputs of work is the primary responsibility of the supervisor. But he should also guard against waste of materials and time which may be caused by over-speeding of operations. The office activities mainly consist of paper work. Reduction in wastage of paper used in the course of office work for a desired output always leads to overall efficiency and cost reduction.

6   *Develop understudies.* The supervisor should always be concerned with the growth and development of the organisation. It requires more capable persons to be available to take up different positions. The contribution that the superviso   can make to an organisational development is by providing the employees to take up the higher positions to replace the existing personnel. Thus, the supervisor should develop capable assistants for replacements in required number. Failure to do so may hinder his own growth in the organisation.

7   *Establish good reporting system.* Every decision and action of the supervisor requires approval and backing of the higher level management. Hence, it is essential for him to report what is going on in the unit to his supervisors giving reasons for the steps taken to maintain and improve efficiency of work.

8   *Feedback on supervision.* A good supervisor will always obtain feedback as regards his methods of supervision. He ascertains what is the effect of his supervision on the work output, motivation and morale of the subordinates. For this purpose, the supervisor may have informal or casual conversation with

his subordinates, arrange group discussion, interview, etc., to find out what is bothering the employees at work. Maintaining harmonious relations with the subordinates, and providing adequate and correct information at the right time are helpful in avoiding or minimising conflicts, as well as. needless troubles.

17.8 HUMAN RELATIONS IN SUPERVISION

A supervisor with all qualifications may not succeed in his job unless he is able to maintain proper human relations with and among his subordinates. It is true that knowledge of office work and skills of supervision are necessary, but the daily challenges to most supervisors do not arise out of the work related with the motivation of the employees. In fact, the challenge lies in stimulating the group to the best of their abilities, and making it possible for them to feel contented and happy in their day to day work. A supervisor does not merely deal with machines but mostly with people who operate the machine. Hence, it is essential that he must adopt a human approach while dealing with the office staff.

To maintain satisfactory human relations, the supervisons should be open-minded, impartial and fair in handling day to day problems of his work group. He must remove the barriers of communications, if any, between himself and the members of the work group. He should be a good listener and at end to the problems and difficulties of the subordinates with due attention and sympathy. He must also keep up to his commitments to the subordinates at any cost.

To achieve and maintain better human relations at work, the office supervisors should have regular meetings with the subordinates to discuss various issues concerning them and their work. Suggestions, if any, should be brought to the notice of the higher level management for due consideration. This is likely to bring about harmony in team work, develop a positive attitude towards work and minimise conflict among the employees.

Check Your Progress C

1   Which of the following statements are True and which are False ?

   i)   Office supervisors should evaluate the merit of the employees in their jobs only on the basis of objective measures of output.

   ii)   It is not necessarily appropriate for an office supervisor to send regular reports to the office manager, if he is able to resolve all problems himself.

   ii)   An employee who caries not follow the roules effier   may be excused in some cases if he does not follow the rules and regulations in certain circumstances.

   iv) The supervisor should control overspeeding of work and check on output so as to minimise wastage of materials.

   v)   The office assistants must be developed for higher positions so that the supervisors may also grow with the organisation's growth.

2   Mention four steps whereby the office supervisor may be able to maintain good human relations :

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3   Why is simple language considered desirable for communications made by the

supervisors ?

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17.9   LET US SUM UP

The present day business activity requires group effort to achieve organisational objectives. Wherever group work is involved, there remains the vital task of seeing that the work is ctually performed and completed efficiently and on time. This is the basic task of supervision.

Application of techniques, principles and practices, involved in the supervision of the office activities, is known as office supervision. In the absence of the supervision in office, each employee may carry out what he or she likes to do in a manner convenient to him or her. Besides, a new worker cannot be expected to perform his/her job well unless he is well instructed, guided, and directed properly. No other person can do this job better than the office supervisor.

The office supervisor exercises limited powers which are delegated to him by the office manager. Office supervision is a continuous function; it is a delegated function, it is first level management. In a small organisation, the same person may act as the office] manager, as well as, the office supervisor. But in a large enterprise, the office manager may be assisted by one or more supervisors for day to day supervision of work. The office] supervisors are first level managers and exercise delegated powers to secure both efficiency and effectiveness.

The office manager is a person who is overall incharge of general administration directly reporting to either the Company Secretary or the General Manager However, the office supervisor works under direct supervision of the office manager, and uses delegated powers to guide, direct and motivate his subordinates. He occupies a very delicate but important position in the organisation structure of the office. He is the linking pin between the middle-level management and the operative personnel.

The office supervisor is a key figure in managing office work. Every plan and policy must pass through him for implemenation. The supervisors role is sometimes a difficult one to manage.

Being a first level manager, his subordinates do not consider him to be one of them. Yet they consider him to be their spokesman to protect them from unfavourable decisions of the higher level management. On the other hand, because of his lower rank, he is separated from higher level management. But he is expected to secure the co-operation of the subordinates in achieving the maximum output at the minimum cost. As a result, the supervisor has often to bear the pressure from both the management and the employee union. However, the supervisor in a modern enterprise is recognised as a source of work-knowledge to the work group and as the fountain head of technical knowledge and information.

To the extent required for executing his task, a supervisor also performs managerial functions. The more important duties of the office supervisor include setting targets of output, scheduling the flow of work, creating proper physical environment, establishing systems and procedures, assigning work to the office assistants, controlling work performance of the employees, evaluating employee performance, etc. The supervisor has responsibilities towards his superiors, subordinates, as well as, fellow supervisors.

The essential qualifications of an effective supervisor include; sound knowledge mainly of various office activities, awareness of rules, regulations, authority and responsibility; ability to communicate effectively, and leadership qualities. A good supervisor is also expected to have certain personal qualities like punctuality, self discipline, alertness, decision-making ability, human approach, integrity of character, sympathy and understanding in relation to the subordinates.

To be effective in his job, a supervisor must keep in view the following requirements, viz., he should operate objectively, adopt participative style of supervision, enforce rules and regulations strictly and impartially, use simple language in communication, reduce waste and control output so as to prevent overspeeding, develop assistants for higher positions, establish good reporting system, and obtain feedback as regards his methods of supervision.

The supervisor must maintain human relations with and among the subordinates. It is essential that he should adopt a human approach while dealing with the office staff. For this purpose he should be open-minded, fair and impartial in handling day to day problems of his work group. He should have regular meeting with his subordinates to discuss issues concerning them and their work.

17.10 KEY WORDS

Group effort :   Work done by a number of individuals assembled together with a common goal.

Linking Pin :   One who serves as a link between parties.

Objectives :   Something toward which effort is directed.

Office Manager :   The Office Manager is the head of the office, and is also incharge of overall administration of the office.

Supervision :   Supervision means overseeing subordinate employees at work, so that the work is performed efficiently and effectively in accordance with the established rules and procedures.

17.11 ANSWERS TO CHECK YOUR PROGRESS

A   3   (i) True   (ii) False   (iii) True   (iv) False   (v) False

B   1   (i) True   (ii) False   (iii) False   (iv) True   (v False
         (vi) True   (vii) False   (viii) False   (ix) True   (x) True

C   1   (i) True   (ii) False   (iii) False   (iv) True   (v) True

17.12 TERMINAL QUESTIONS

1   What do you understand by supervision ? Explain the significance of office supervusuin

2   As an office manager, what duties and responsibilities would you assign to your supervisors ?

3   Who is an office supervisor ? What are the essential qualifications and qualities of an effective office supervisor ?

4   What factors will you keep in mind for effective supervision of the office staff?

5   Outline the qualities of a good supervisor ? What functions does he perform ?

Note: These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

UNIT 18 WORK MEASUREMENT AND STANDARDISATION

Structure

18.0   OBJECTIVES

After studying this unit, you should be able to :Study

- explain the meaning and objectives of work measurement
- state why measurement of office work is necessary and what is its importance
- describe the concept and techniques of measuring an office work
- explain what is meant by standardisation and the benefits of setting work standards
- describe the methods/techniques of setting standards.

18.1   INTRODUCTION

The main purpose of office activity in any organisation is to provide services efficiently to various functional departments of the organisation. In the earlier units, you have studied the nature of administrative arrangement and facilities required in an office, systems and procedures relating to records management, and handling of mail, uses of office machines and equipments, and management of office stationery and forms control. The growth of business is followed by a corresponding growth in the volume of office work to be handled by an increasing number of employees, leading to an increase in the cost of office operations. In a modern office, one of the major concerns of the office manager is to ensure that efforts are made to keep the cost of operations to the extent possible low. To bring about reduction in office costs and for the purpose of cost saving wherever possible, large organisations have a separate department known as Organisation and Methods (O & M) department. Personnel from this department periodically carry out "Operation Analysis", that is, analysis aimed at work measurement and work improvement. They set or revise standards of work output. Operation analysis undertaken at regular basis enables office costs to be reduced. It also helps office personnel achieve higher efficiency in their day to day work. In this unit, you will learn about the objectives and importance of work measurement , the meaning of standardisation, and the benefits of setting work standards. In addition, you will

learn about the methods and techniques of work measurement and setting standards of the office work.

Work Measurement and Standardisation

18.2 MEANING AND OBJECTIVES OF WORK MEASUREMENT

There is often a wide difference of opinion between employees and management on the issue of 'output particularly as 10gards what is a "fair day's work". However, in manufacturing activities which involve production of goods and whose output can be measured in units of production, fair day's work can be reasonably determined. But in the case of office work, it is difficult to measure a 'fair day's work' in view of the nature and type of work.

In simple words, work measurement refers to determining the output in quantitative terms. It implies measuring the volume of work completed and the time spent in completing it. By implication, therefore, it involves the study of the time required for performing each element of an office operation. Thus, work measurement includes the task of analysing each operation, identifying its elements of parts and measuring the time taken by an employee in performing each element of the operation. This technique used for work measurement is known as "time study" Besides determining the actual time taken in performing any operation, time study also enables time standards to be set for performing the operation.

Although the main objective of office work measurement is to aid management in planning and controlling office operations, yet some of the other objectives of work measurement are :

a) To decide the number of office employees to be employed in each section/department;

b) To determine the standard work-load for each office employee;

c) To measure the performance of individual employees;

d) To help in deciding appropriate methods of motivation;

e) To simplify work systems;

f) To increase individual efficiency;

g) To reduce the cost of office services;

Check Your Progress A

1   Which of the following statements are True and which are False ?

i)   Work measurement means determining the quantity of output.

ii) Time spent by office employees in the office is determined by 'time study'.

iii) Identifying the elements or parts of an operation is possible through operation analysis.

iv) Work measurement is carried out with the help of the technique of time study.

v)   The quantity of output cannot be measured in any work place.

2.   What do you mean by work measurement ?

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3   List the objectives of work measurement ?

    a)   ....

    b)   ....

    c)   ....

    d)   ....

    e)   ....

    f)   ....

    g)   ....

    h)   ....

18.3 MEASUREMENT OF OFFICE WORK

Work measurement refers to the application of techniques designed to determine the fair time for a qualified worker to carry out a specified job at a defined level of performance. The techniques are based on scientific principles and found beneficial in exercising control over office costs. Therefore, the exercise of work. measurement should be undertaken in every office. Although, the general view is that most of office work is repetitive in nature and the quality and quantity of work can be measured, However, there are others who hold a different view. According to them, measurement of office work is not always useful for the following reasons :

(a) In most organisations, the number of employees in the office is too small and as such there is no need for using techniques of work measurement to reduce the cost of office services.

(b) Office work is both varied and complex. It consists mainly of paper work and varies from organisation to organisation depending on the nature of business activities. Hence, it does not call for the use of work measurement techniques.

(c) Because of the close proximity of office employees to management and administration, work measurement becomes superfluous.

(d) By and large, work measurement is possible only in the case of production activities involving physical output.

Nowadays, office work is also considered to be productive as it provides valuable services to other departments. Besides, nearly three-fourths of all work done in an office is measurable. Actually with some adjustments in the work measurement techniques, office work which can be measured includes activities relating to filing and indexing, invoicing, typing, duplicating, mailing, electronic data processing etc.

As already stated, the basic purpose of work measurement in an office is to assist office management in planning and controlling office services. Several other objectives are also served by work measurement, like establishing standard work load for each employee, determining the number of employees required in any section, simplifying office systems and procedures, evaluating the performance of employees and controlling office costs.

Steps in Work Measurement

The following steps should be taken by the office manager before work measurement is undertaken in an office:

a) Planning, b) Work improvement and simplification, c) Standardisation of office

activities, d) Listing of tasks to be measured, e) Defining unit of measurement and methods of measurement, t) securing subordinates' willing co-operation and g) executing the programme.

Let us explain each of the steps.

1   *Planning:* Work measurement programme in an office involves a considerable amount of planning. Firstly, the objectives of the programme must be outlined and stated clearly. Secondly, techniques to be employed should be decided upon. Thirdly, inside experts or outside professionals in the field to carry out the task should be contacted and necessary arrangements made for them to carry out the work. Fourthly, the exact date of commencement and period to be devoted to the programme must be fixed. In other words, the ground work, preliminary to office work measurement, is to be carried out with great care.

2   *Work improvement and simplification :* Methods of operation involved in different office activities are to be thoroughly studied and analysed. Any possible improvement or simplification in the existing methods should be identified, observed and analysed. The meaning and factors to be considered for work simplification are discussed in Unit 19 of this Block.

3   *Standardisation of office activities :* Work measurement requires office activities to be standardised. This will ensure that the tasks to be measured are performed in the most efficient manner and that all employees engaged in the tasks use the same methods. No purpose will be served by measuring the work of employees who use different methods for performing the same task.

4   *Listing of the tasks to be measured :* The tasks which are to be measured have to be decided and classified. A detailed list of such activities needs to be prepared and the office manager can play a leading role in that respect.

5   *Defining the unit of measurement and method of measurement :* The specific unit in terms of which work is to be measured must be defined clearly and adequately. For example, the number of copies taken out per hour may be the unit of measurement in case of a duplicating machine operator, or in the case of a typist, it may be the number of typed pages per hour. The method of measurement would be accordingly decided.

6   *Securing subordinates' co-operation :* No programme of work measurement can be executed unless there is willing co-operation and active participation of the employees. Individuals who will have to work closely with the implementation of the programme must be made fully aware of the pros and cons of work measurement before their co-operation is sought. The office manager has an important role to play   this regard. He must acquaint his subordinates with the benefits of the programme and assure that the findings of the study will be used for providing incentives for efficient workers and motivate others to improve their efficiency.

7   *Execution of the programme :* The next stage in work measurement is the implementation of the programme as planned.

Check You Progress B

1   Which of the following statements are True and which are False ?

   i)   Measurement of office work is impossible as it consists of only paper work.

   ii) To measure office work, some adjustments may have to be made in the techniques of measurement used for measuring factory work.

iii) Planning for a programme of work measurement includes contacting experts in the field.

iv) Possible improvements or simplifications in the existing methods of office operations should be identified before commencement of work measurement programme.

v) Work measurement will serve no purpose if office work is already standardised.

vi) The office manager has an important role to play in securing the co-operation of his subordinates for the work meassurement programme.

2   Enumerate the steps you will take to execute work measurement programme.

1	5
2	6
3	7
4	8

18.4   IMPORTANCE OF OFFICE WORK MEASUREMENT

Basically, work measurement serves the purpose of measuring the output of work, establishing time standards and evaluation of performance of work by individual employees. The importance of measuring office work may be said to arise out of the purposes served by it in the management of office activities. Specifically, work measurement serves as an aid to office management in the following ways:

1   *Planning and Scheduling Work :* Time standards set on the basis of work measurement help the office manager to plan and prepare the time schedule for completion of work. Time standards provide necessary information regarding the time required for performing the jobs assigned to different employees. On that basis, the office manager or supervisor can determine the best possible path to be followed for completion of work.

2   *Appraisal and Control of Employee Performance:* In the process of work measurement, time standards are objectively set on the basis of time study of work performed by capable employees under standard conditions. Variation in the performance standards set for the jobs. The relative efficiency of employees can, thus, be assessed. Corrective action can also be initiated, where necessary, to rectify the causes of variation from the standards.

3   *Estimation of Manpower Requirement :* Work measurement helps management in having a realistic estimate of the manpower requirements of the office. The number of office employees required to handle various jobs can be estimated on the basis of the required output of work and the time standards set for performance of the work. Say, if the standard set for a ledger keeper is that he should complete ledger posting of 500 transactions per day, and 5000 transactions are required to be posted every day, the number of ledger keepers required would be ten. Besides, estimating the number of office staff to be employed in different sections, the office manager is also able to distribute the total work load more equitably among the office staff on the basis of time studies.

4   *Cost Calculation :* Time standards also help in calculating the cost of office services. it enables management to allocate office cost to various products and, thus, helps in unit cost calculation. Management can also prepare budgets accordingly and determine the end price of the products.

5   *Improved employee motivation and morale :* There may also be schemes to
    motivate employees on the basis of their relative efficiency as determined by
    performance appraisal. Establishment of time standards brings awareness as to
    what is required of each employee in terms of quality and quantity of work.
    This improves employees morale. It also makes easier to recognise better
    work performance and reward efficiency.

Inspite of the recognised importance of work measurement, it has not been used in
offices due to the following reasons :

i)   Clerical work is so varied and complex in nature and differ from office to
      office, that it cannot be measured accurately.

ii)   Cost involved in the programme of work measurement does not make it
      worthwhile considering the actual benefits expected to be derived.

iii) There is lack of interest on the part of office manager when he is unwilling to
      disturb existing pattern of work.

iv)   A simple and acceptable technique of measuring office work is yet to be
      designed.

18.5   TECHNIQUES OF WORK MEASUREMENT IN OFFICE

The following techniques may be used for measuring office work :

1   *Past performance basis:* Measurement of office work can be possible on the
    basis of available past records. The analyst goes through the records of past
    performance kept by the organisation and lays down standards. Such records
    only show the quantity of work output but does not indicate the time taken to
    carry out the work. As a precaution against the possibility of standards being
    set on the basis of either the best performance or the worst performance, the
    analyst may take an average of the best and the worst performance.

    The above method is simple and can be adopted without any great difficulty or
    cost. But standards of quantity and quality set under this method are only
    approximations and as such are not standards in the real sense of the term. In
    fact, the figures reflect what performance could be achieved rather than what
    should have been achieved. Standards so set could be expectedly much below
    the required level of efficiency.

2   *Time Study:* It is the most widely used and best known technique of work
    measurement. Time study method helps in setting time standards for work.
    This method is also known as 'stop watch study' method to measure work.
    Time study or 'stop watch study' is the process of recording and analysing
    systematically the time required to perform office operations by an average
    employee working at average speed under standard conditions, using standard
    methods. Essential requirements for time study are : 1) Skilled analyst;
    2) Standardisation of work methods;   3) Standard conditions under which
    work has to be performed;   4) Selection of well-trained employees who are
    acquainted with the purpose of the study and   5) Determining the duration of
    study, that is, the exact period and month of the year when the study will be
    carried out.

    The following steps are to be taken for conducting a time study programme.

    i)   Identify the job to be studied and break down the relevant tasks into basic
          elements. The job identified for study is to be analysed and the tasks with
          appropriate elements distinguished so that each element has a clear
          beginning and end. For example, the task of Mail opening involves Five

elements, that is, picking up envelope, cutting the edge of envelope, removing the contents of the envelope, connecting the cover with papers contained in the envelope and placing the letter in the tray.

ii) Determine the number of work cycles to be observed and design the time date sheet for recording time elements for each time cycle.

iii) Record the time taken for each element of the work process on the designed time date sheet. A stop-watch is generally used for determining the time taken. This process has to be repeated as per (ii).

iv) Calculate the average time for each element from the work cycle readings (iii).

v) Add allowances for delays, fatigue, etc.

vi) On the basis of above steps (iv & v) work standards can be determined and report drafted/

This method is simple and can be adopted without much additional cost. But the data collected are subject to the nature of conditions and the competence of employees; hence, the standards set so may not be much reliable. However, scope of improvement in this method is not ruled out.

3 Work Sampling : In this method an analyst-expert in work measurement makes 'random' observations of the work performed by different employees in an office and keeps records of the same. The analyst not only records the time taken for a given number of units produced or activity performed, but also how the employee spends his whole time while engaged in the job. However, the analyst does not study each and every job, but selects a few sample jobs. Based on his observations, he finally prepares a report for submission to the departmental manager.

The main draw-back of this method is the difficulty of getting well trained personnel to undertake observation of employees at work. It may often be uneconomical if the size of sample is too large. However, various research institutions have established time standards for certain operations which are involved frequently in office jobs. one can also use these standards with some adjustments suiting to his office.

Check Your Progress C

1 Name the methods of work measurement.

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2 Which of the following statements are True and which are False ?

i) Control of work performance is possible with the help of time standards prescribed for completion of work.

ii) The relative efficiency of different employees cannot be assessed on the basis of work measurement.

iii) Time study is a better method of work measurement in office than work sampling method.

iv) Time standards based on past performance of employees may be as useful as standards based on time study.

v) Some allowance must be made for fatigue also while making time study of any operation.

vi) Calculations of office costs must be made on the basis of only the salaries paid to employees and the cost of paper and stationery used. There is no use of Time Standards for this purpose.

18.6 STANDARDISATION AND METHODS OF SETTING STANDARDS

Before undertaking work measurement in an office it is desirable that one should have completed job analysis work, simplification and standardisation of each job. Work simplification has been explained in detail in Unit 19. It is only after work simplification that standardisation of work is carried out and time standards are set.

Standardisation is generally used to denote bringing about uniformity in the definition and description of work and concepts. In relation to office work, the term refers to defining policies, procedures and methods to be followed and personnel, equipment and materials to be used in performing office work. With regard to any activity, setting standard means "determining levels of accomplishment after analysing all factors which affect accomplishment". Standards relate to performance or output. The office manager has to fix standards of performance for each office activity. Work standards can be set for routine and repetitive operations like billing or invoicing, filing and indexing, typing, ledger, posting, EDP, etc.

Following objectives are expected to be achieved by standardisation:

1 *Cost reduction:* Standardisation ensures economic use of materials, equipment and machines. This reduces cost of operations in the office.

2 *Uniformity in performance:* As materials required for any office activity are standardised, every person has to do the work in the same way and the use of one's own discretion is minimised.

3 *Training costs are reduced:* Uniform procedures and methods ensure interchangeability of staff to meet peak time work load. Employee training costs are, thus, reduced.

4 *Reduction in capital investment:* In the absence of standardisation of office machines and equipments, capital may be invested in sub-standard machines, which may have to be replaced after a short period. Once investment is made to buy standardised machines, replacement needs are not frequent.

5 *Standardisation enables proper performance appraisal:* Individual performances can be easily compared with the standards and proper evaluation of personal growth can be monitered.

Standardisation can be easily brought about in the following areas of office administration :

a) Office furniture and equipments

b) Office forms and statuibery

c) Layout of office

d) Lighting and interior decoration

e) Office machines

f) Office systems, procedures and methods.

It should be very clear that with changes in technology and environment and improvement in systems, standards keep changmg for better performance. Every office manager has to recognise this and adopt changes as and when necessary.

Methods of Setting Standards

While considering the methods of setting standards, the office manager has to choose one of the two options :

i) To set own standards, or

ii) To adopt standards already set by outside agencies. Independent research organisations and Government agencies like the Bureau of Indian Standards (BIS) has fixed standards for various products. Manufacturers design machine, spares, and materials conforming to the (BIS) standards at the time of purchasing office machines and equipments. Otherwise, he has to set own standards for acquiring different items. If the office manager has to set own standards, he/she has to keep in view certain requirements of the standards set. These are :

   a) Standards must be realistic and reliable.

   b) Standards should be set at the level at which an employee of average caliber is capable of attaining the standard under normal conditions.

   c) Standards must be easily understandable and acceptable to employees.

   d) Standards must also be flexible in order to meet the variations in working conditions.

   e) Standards should be reviewed at regular intervals.

Keeping the above requirements in mind, any one of the following methods may be used for standardising office activities :

i) *Past records:* Past records maintained in the office may be adopted for setting standards. Records relating to previous 3 to 5 years in the office is reviewed and necessary data is gathered in relation to specific jobs. Any change required to be made should be taken into account with respect to introduction of machines, work simplification, etc. The best performance for each activity is identified and used as the standard. However, standards set on the basis of past performances are always subject to change.

ii) *Motion study:* Under this method, the office manager is assisted by a specialist in the field who records the time taken by an employee to perform a specific task alongwith movements of his limbs in the process. A detailed note is kept of the motions and the time taken during each motion. For this purpose, the specialist uses 'stop-watch'. It is generally used for measuring time by starting at the beginning of each office activity and is kept running during the entire work cycle till the last element is completed. This technique requires a record sheet to be used for each employ. The Record Sheet is then analysed and after making allowances for delay etc. time standards are established. The main drawback here is the tendency of employees to slow down during observation. This cannot be altogether ruled out. To avoid this possibility micro filming of the entire work is done and then analysed before time standards are set. This method is more reliable and scientific in approach.

iii) *Work sampling method:* Where it is not possible to examine each and every office activity by the expert, office jobs can be studied on selective basis. Data so collected is then analysed. One's own work experience plus the data analysed enable the expert to set time standards for the work. Actual performance is compared with the standard set and causes for variation, if any, is then analysed for corrective action.

18.7 BENEFITS OF WORK STANDARDS

A work standard is a measure of accomplishment in a specified activity under

specific conditions. It is a yardstick used to measure actual performance. The availability and use of work standards provide the following advantages to an organisation:

1   Standards help management in measuring the efficiency with which office employees perform their jobs.

2   Work standards help the office manager in ascertaining the causes of poor performance.

3   Work standards help supervisors in communicating to the employees the efficiency level expected of them.

4   Less supervision is needed if the standard procedures for doing the job are established.

5   Standards also provide the basis for suitable incentive systems.

6   Work standards help in determining office costs with greater accuracy.

7   Performance standards cannot be fixed without standardisation. Work standards help management in controlling office activity.

Check Your Progress D

1   What is meant by standardisation in relation to an office ?

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2   Name three methods any of which may be used for setting up standards of office work.

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3   Which of the following statements are True and which are False ?

   i)   Cost of training employees is reduced if office methods and procedures have been standardised.

   ii) The office manager must always adopt own standards while purchasing office machines.

   iii) Standards of work should be fixed even if those are not acceptable to the employees.

   iv) Motion study refers to the study of time spent by employees in movement of their limbs in performing a job.

   v)   Causes of poor performance of work cannot be ascertained on the basis of work standards.

   vi) Lighting and interior decoration cannot be standardised in any office.

18.8   LET US SUM UP

Work measurement refers to determining the quantity of output. It implies

measuring the volume of work completed and the time spent in completing it. The main objective of office work measurement is to aid management in planning and controlling office operations.

According to one view point, measurement of office work is not useful due to the following reasons : number of employees in the office is small; office work involves varied and complete paper work and hence is not measurable, close proximity of office staff and management. However, these are not valid reasons nowadays. Actually various office activities are measurable and should be measured with some adjustments in the work measurement techniques. This is because work measurement serves the basic purpose of planning and controlling office services besides assisting management in establishing standard work load for each employee, determining office manpower, simplifying systems and procedure and evaluating employee performance.

Steps in work measurement include: planning the programme, work improvement and simplification, standardisation of operation, selecting the tasks to be measured, determining the unit of measurement and methods,securing subordinate cooperation, and executing the programme.

Work ineasurement serves as an aid to office management with respect to: planning and scheduling work; appraisal and control of employee performance; estimtion of manpower requirement; calculating the cost of office services; improving employee motivation and morale. The techniques available for office work measurement are: Measurement based on past performance; Time Study; and Work sampling. Measurement based on past records of performance is simple and can be adopted without much difficulty. However, standards set on that basis indicate what could be achieved rather than what should have been achieved. Time study is the most widely used method of work measurement. It involves recording and analysing systematically the time required to perform office operations by average employees under standard conditions of work and using standard methods. Work sampling involves raidom observation by an expert analyst of the work performed by differen. employees. The study or observation is restricted to a few selected jobs as sample. The method may be uneconomical if the sample size is large. Standaraisation generally denotes bringing about uniformity in the definition and description of jobs and concepts. In relation to office work, it refers to defining policies, procedures and methods to be followed, and personnel, equipment and materials to be used in performing office jobs. Setting standards of activity means determining levels of accompushmen after all relevant factors have been standardised.

The objectives of standardisation are: cost reduction, uniformity of performance, savings on capital investment, and performance appraisal. The office manager may set own stand ds or adopt standards set by outside agencies.

For the purpose of setting own standards, the officer manager should keep in view the following requisites of standards set: 1) Standards must be realistic and reliable;   2) Standards sheuld be attainable by the average employee under normal conditions;   3) Standards must be acceptable to employees;   4) Standards must be flexible enough, and 5) Standards should be reviewed at regular intervals.

There are three methods of standard setting based on i) Past records, ii) Motion study and iii) Work sampling. Standards set on the basis of past records of 3 to 5 years may be adopted with necessary changes with regard to introduction of

machines, work simplification, etc. Motion study requires physical movement of limbs by employees to be noted alongwith the time taken. The record sheet is then analysed and time standards are set making allowance of selected office jobs to be studied and analysis of data to set standards.

The benefits of work standards arise out of the advantages derived by management in measuring the efficiency of employees at work, ascertaining the causes of poor performance, communicating to the employees of efficiency level expected of them, reducing supervision, introducing suitable incentive systems, determining the cost of office services with greater accuracy, and controlling office activity.

18.9 KEY WORDS

Motion study: Study of physical body movements involved in performance of specific jobs.

Operation analysis : Study of an individual operation of particular workman.

Work Imporvement   A scientific, analytical procedure for determining a preferable **Work method**

Work Measurement: A programme of measuring the volume of work done and the time taken for its completion.

Work Sampling : Statistical sampling of activities being performed at a work place.

Work Simplification: Making a job easier, safer and less time consuming to perform.

Work Study: A process directed towards securing improvements in work performance.

18.10 ANSWERS TO CHECK YOUR PROGRESS

A 1	(i) True	(ii) False	(iii) True	(iv) True	(v)False
B 1	(i)False	(ii)True	(iii)True	(iv)True	(v)False
	(vi)True				
C 2	(i)True	(ii)False	(iii)True	(iv)False	(v)True
	(vi)False				
D 3	(i)True	(ii)False	(iii)False	(iv)True	(v)False
	(vi)False				

18.11 TERMINAL QUESTIONS

1   What is work measurement? Outline its importance.

2   Define work measurement and enumerate the difficulties involved in the measurement of office work.

3   Explain the techniques used for work measurement.

4   Briefly outline the objectives of office work measurement. What are its advantages?

5   Write notes on:

    i)   Introduction of work measurement progress.

    ii)   Time and motion study for setting standards.

    iii) Work sampling method of work measurement.

6   Standardisation is essential in the office. Discuss.

7   As office manager, explain the steps you would like to institute in work measurement programme.

8   What are the objectives of standardising office activities? Discuss briefly.

9   Outline and describe the methods which may be used for setting standards of office work.

Note: These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

UNIT 19   WORK SIMPLIFICATION

Structure

19.0   OBJECTIVES

After studying this unit, you should be able to :

- explain the meaning and objectives of work simplification;

- state the various advantages of work simplification;

- list the factors to be considered for work simplification;

- outline the steps in planning for improving procedures and methods;

- explain the meaning and usefulness of O & M;

- describe the ways and means of reducing office costs and effecting cost savings.

19.1   INTRODUCTION

You know that office work is performed by the office employees with the help of forms, equipment and machines. Various systems, procedures and methods are set up so as to execute office work in a planned and smooth manner. However systematic and organised the office work may be, there remains room for doing things in a better way. Work simplification is based on the philosophy that there is always a better way and the best way is never achieved. The concept of work simplification, first developed by F.W. Taylor as a managerial tool for improving the performance of factory workers in late 1800s, was applied to office activities by William H. Leffingwell in early 1900s. In this unit, we shall explain the meaning and objectives of the office work simplification, its advantages and factors to be kept in view for the purpose. We shall also explain the meaning and usefulness of O & M' and describe the ways and means of cost reduction and cost saving in office operations.

19.2   MEANING OF WORK SIMPLIFICATION

Work simplification may be defined as 'the organised use of common sense to eliminate waste of material, equipment, time, energy and space in the performance of office work, It is connected with finding easier and better ways of carrying out

office operations. However, doing a job better does not mean working faster, nor does it always mean adopting new methods of present tools and equipment to produce maximum efficiency with minimum cost. Work simplification is a continuous process. There is no end point at which we can say that we have found out the ideal way of performing a task. There is always scope for effecting further improvements. It is small wonder that work simplification is also frequently referred to as 'work improvement'. British scholars, however, prefer to use the term Organisation and Methods (O & M) in place of the American term, Work Simplification.

19.3 OBJECTIVES OF WORK SIMPLIFICATION

The basic objectives of any work simplification programme may be stated as follows :

1) To eliminate waste of all kinds,

2) To improve the flow of work,

3) To devise efficient and effective procedures for paper work,

4) To improve work output, accuracy and efficiency,

5) To improve the quality of services rendered by the office employees,

6) To make the office staff 'efficiency-conscious', and

7) To reduce office costs to the extent possible.

19.4 ADVANTAGES OF WORK SIMPLIFICATION

When properly planned, a programme of work simplification may after the following advantages :

1   *Smooth flow of work :* Work simplification is expected to eliminate use of unnecessary forms, wasteful motions and interruption in work. Work procedures are designed in such a way that a smooth and uninterrupted flow of work is ensured.

2   *Reduced cost of operation:* Elimination of waste in materials, equipment, machines, energy and space ultimately lead to significant savings in office operating expenses. Facilities are used fully and resources are committed to the best possible use. This, in turn, enables work to be performed at a reduced cost.

3   *Improved performance:* Work simplification is aimed at improving the level of work output. Methods of work are well streamlined so that the employees are able to perform their tasks properly at the right time. This helps in speeding up work and achieving results accurately. When there is a prescribed method of doing work, the employees learn the ropes quickly and show improved performance.

4   *Better* communication : Work simplification also makes communication better in the office. Simplification of forms and procedures helps the employees pick up things quickly and avoid red tapism. As a result, communication between the employees working at various levels improves.

5   *Efficiency-consciousness :* Work simplification makes employees 'efficiency-conscious'. They realise the importance of doing things in the right way and show results. They begin to behave in a responsible manner, leaving no scope of criticism by their superiors. Such a healthy atmosphere helps them

take greater interest in work and participate in work simplification programmes more actively.

Check Your Progress A

1   Explain the meaning of work simplification.

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2   State three important objectives of work simplification.

i) ....

ii) ....

iii) ....

3   Which of the following statements are True and which are False?

i)   The concept of work simplification was first developed by William H. Leffingwell.

ii) Work simplification is concerned with an intelligent use of tools and equipment to achieve maximum efficiency at minimum cost.

iii) Work simplification is also called 'work improvement'.

iv) Work simplification aims at perpetuation of wasteful motions in office activities.

v)   Work simplification is the American name given to a technique which is called Organisation and Methods (O & M).

19.5   FACTORS TO BE CONSIDERED FOR WORK SIMPLIFICATION

The following factors need to be duly considered in connection with work simplification programmes in any office:

1   *Securing the employees' cooperation :* Cooperation of all the employees is an essential requirement for successful implementation of work simplification programmes. Changes are often resisted by the employees for one of two reasons: fear of the unknown, and apprehension of personal loss. The employees, generally, dislike uncertainty associated with work simplification programmes. For example, introduction of work processors, generally, operate the word-processor. It may, of course, generate a sense of fear that they will not be able to learn how to operate the new equipments. They may, therefore, develop a negative attitude towards working with word processors or behave indifferently if required to use them. Fear of personal loss may be another reason for resisting change in existing methods and procedures. Once an organisation has established certain methods and procedures relating to various activities, the employees are trained, accordingly, and feel comfortable with the status quo. Changes threatening the established practices create a sense of fear that it may lead to some personal loss too.

Resistance can be overcome if the employees are convinced about the logic of a change. They must be informed about the nature of changes proposed and misunderstanding, if any, cleared. Preferably, the employees should be encouraged to participate in planning the work simplification programmes actively. To this end, they must be assured of changes being introduced with

necessary preparations like training the operatives affected by the proposed changes.

2   *Simplifying routine work :* The simplest way of doing any work is expected to be most effective and economical. The more complicated any method or procedure is, greater is the possibility of waste and inefficiency. The routine steps required to complete any operation must, therefore, be simple. Wasteful motions causing delay must be reduced to the minimum. The sequence of activities should, in the final analysis, represent the best possible combination for accomplishing work, taking into account the available facilities, working conditions as well as, constraints of the operations.

3   *Ensuring smooth flow of work :* Work should flow from one stage to another in a smooth and uninerupted manner. To the extent possible, the flow of work should be steady and always in a forward motion. The employees are sometimes con...onted with pressure of heavy work load while they are not fully occupied at other times. Such fluctuations in the volume of work result in slowing down of the flow and also disturb the rhythm of work. A forward and straight-line flow ensures speedy and timely execution of work. Backward movement   say zig-zag flow extends the distance to be covered from one stage to another. Such long and winding routes lead   purposeless movement of papers and people. Instead, work must proceed smoothly along a straight-line with a view to ensure efficiency at various stages.

4   *Using forms, equipment and machines effectively:* The employees should be provided with required forms in adequate quantity, equipments and machines which are well maintained so as to secure efficient performance of work. Use of forms, equipments and machines accounts for a large proportion of the total office expenses. Unless these are employed judiciously, there is bound to be wastage of time, energy and expenditure. Complicated forms are difficult to understand. As a result, the employees may have to seek frequent guidance and clarifications from supervisors causing needless delays. Likewise, if equipments and machines remain idle due to poor maintenance and repairs and lack of proper training of the operators, it may hamper speedy execution of work. Therefore, it must be ensured that equipment and machines are used without interruptions in work and unnecessary use of forms done away with.

19.6   STEPS IN PLANNING FOR IMPROVEMENT OF PROCEDURES AND METHODS

Work simplification is a systematic way of improving work performance in an organisation. Its objective is to simplify and improve the procedures and methods followed in processing work at various levels. Usually, the problem of how to improve work performance is accomplished through a logical, orderly and step-by-step approach. The following steps are generally followed while planning for improvement of procedures and methods in an office:

1   *Selecting the subject of study:* The first step in work simplification is to select the subject of study, i.e., the specific procedure or method to be examined for possible improvement initially, the problems causing trouble, like high cost, interruptions in the flow of work, under-utilisation of personnel or equipment, low volume of work should be identified. Then the enquiry must focus attention on areas where work improvement is possible. Suppose the problem to be studied is the volume of office correspondence and the cost of handling it. If the costs are too high this year, the investigator must find out the reasons or the increase to determine whether they could be cut down without Sicrificing goodwill and morale of the employees.

2   *Planning the work :* The next step is to plan the work. Before proceeding on any assignment, it is necessary to plan well in advance, seeking answers to questions like what we are going to do, how we should proceed, what information is to be obtained and from whom. Of course, the actual planning depends on factors like the nature of assignment, the size of departments under survey, their geographical dispersion, etc.

3   *Collecting data :* Collection of necessary information about present procedures or methods comes in the third step. Usually, detailed information regarding procedures and methods could be collected from office documents, reports and manuals. This could be supplemented by the information collected through interviews with employees and their managers. Observation of the actual performance of work could also aid the process of enquiry. At this stage, it is desirable to give an opportunity to the employees to air their opinions freely, and allow them to express their viewpoint about the desirability of bringing about changes in the relevant methods and procedures.

4   *Analysing data :* The next step is to analyse the facts collected to find out where and to what extent improvements can be effected. The methods and procedures followed currently must be evaluated against some pre-determined criteria like the volume of work, time taken, quality of work, cost, etc. Each activity must be scrutinised in terms of purpose, effort, time and cost. Such a thorough analysis would throw light on forms being used presently, the movement of personnel and papers from one stage to another, the nature and intensity of supervision, the cost of operation, and degree of mechanisation employed to carry out the work under enquiry. etc.

5   *Devising improvements :* The next step is to devise a suitable plan for improving existing procedures or methods. The shortcomings noticed in the existing set up through the above procedures may give valuable clues as to where, how and to what extent changes have to be made. The proposed changes may include improvement, replacement or elimination of certain steps in the methods or procedures. At this stage, the person in charge of the whole enquiry must discuss the proposed changes with the departmental heads, supervisors, and employees, who are likely to be affected in course of time. Active participation of personnel in the development of procedures and methods ensures smooth implementation of the work simplification programme at later stages. The proposals are then submitted to the top management for approval.

6   *Implementing the changes :* The last step in the work simplification programme is to implement the proposed changes. The implementation of a new scheme may require :

   - training of the personnel in the new or improved methods:
   - physical changes in the layout of equipment, machines, etc.
   - introduction of new forms, machines or equipment,
   - recruitment of new staff, etc.

Finally, it is also necessary to ensure follow-up action to see how the new plan is actually working. If it is not working satisfactorily, suitable remedial steps should be taken to ensure its smooth implementation.

Check Your Progress B

1   List four important factors to be considered while carrying out work simplification programme

   i)   ....

ii) ....

iii) ....

iv) ....

2 Fill in the blanks:

i) .... from all the employees is an essential requirement for the work simplification programme.

ii) Change threatens the ....one has already made in the ....

iii) The simplest way of doing work is usually the most .... and..............................

iv) Complicated forms defy ....

v) A .... and .... flow ensures speedy execution of work.

vi) Work simplification is a .... way of improving an....................

19.7 O & M : MEANING AND USEFULNESS

Organisation and methods (O & M) is a systematic attempt on the part of an organisation to improve the organisational set up, simplify and improve methods and maintain a high level of efficiency in office administration. It includes everything which contributes to the efficiency of office work. It is through O & M that office procedures and methods are continuously improved and work simplification is achieved. With the increasing pace of business operations, size of offices, the extension of office services, invention of more complicated methods and machines, it has become virtually impossible for the executives to spare time for reorganising and redesigning office methods and bring about work improvements. The executives cannot afford to ignore the day-to-day problems while focusing attention on long-term planning. Special staff analysts and experts are, therefore, required to study the existing methods, design new procedures, and come out with better ways of doing things. Normally, O & M survey is carried out by an independent person, because :

i) he is free from routine work and has the time to make necessary enquiry;

ii) he need not worry about departmental feelings, nor about his position, as he is independent by definition;

iii) not being attached to any section of the office he can view the work objectively; and

iv) he brings to the study the accumulated experience of previous enquiries.

Big firms generally depend on qualified internal staff for carrying out the O & M investigations. The staff selected for this purpose should not only be conversant with the basic techniques of data collection and analysis, but also possess some personal qualities like power of observation, inquisitiveness, tact and patience in dealing with people, sound knowledge of clerical work and its management, and more importantly, the ability to convince people and seek their cooperation.

Usefulness of O & M

O & M is a systematic way of checking the efficiency of the office work. It involves activities which are intended to achieve an increase in efficiency either by providing a better service, or a cheaper one, or both. The main benefits of O & M may be stated thus :

1 *Improves administrative efficiency :* O & M simplifies all necessary operations, procedures and methods. Fluctuations in the volume of work are also avoided. A forward and straight-line flow of work is maintained

throughout the organisation, paving the way for speedy and smooth performance of work. As a result, wasteful motions, and duplication of efforts are avoided. This, ultimately, helps in cutting down the office costs substantially and improving administrative efficiency.

2   *Improves communication :* Simplified and well-designed forms and procedures help employees understand managerial communications in a better way. They are able to follow the reasons for effecting changes in methods and procedures fairly and easily. In such an atmosphere, the management can carry out the proposed changes without much resistance from the employees and bring about improvements in overall performance.

3   *Keeps people alert :* O & M investigations force the employees to be cost-conscious. They are made to realise the importance of working efficiently. They are compelled to learn new and improved ways of doing things and show superior performance. The management, on the other hand, is forced to take note of constant changes that surround business operations and invest large sums in finding out better ways of doing jobs at various levels.

19.8   OFFICE COST REDUCTION AND COST SAVING

Office work makes indirect contribution to the achievement of organisational objectives. The office, as such, does not sell anything. It does not also make anything that can be sold. Therefore, some people tend to believe that the cost of office work is 'unproductive'. This, however, is not the truth. The services rendered by the office to various departments result in a smooth and efficient performance of the work from which income is derived. Likewise, services rendered by the office to the customers, suppliers, financiers, government, and the public, go a long way in building up the firms' goodwill in. the market and among the public, and in securing their patronage.

Of course, the value of office work cannot be measured precisely. Many office managers, therefore, begin to think that whatever is spent in the office work conventionally, is necessary and justified. This, again, is a wrong thinking. Since the benefits of office services cannot be measured in quantitative terms, the office costs incurred by any enterprise can be justified only by means of constantly keeping office costs under check, avoiding waste and extravagance of all kinds. However, cost saving or cost reduction does not mean that the enterprise must spend as little as possible.

It does not mean miserliness also. In fact, it means spending wisely and rationally, i.e., committing funds to the best possible use avoiding wastage of all kinds. A manager interested in cost saving or cost reduction will not spend even a small amount if it does not serve any useful purpose. He will, however, be prepared to spend any amount provided the resulting benefits are adequate. The term 'cost reduction' implies constant checking of the office methods, practices and procedures so as to rationalise office operations through techniques such as O & M and Budgetary Control. Office cost saving, on the other hand, implies avoidance of wastage of all kinds through measures, such as promoting cost consciousness among the employees, administrative vigilance, and supervisory control.

19.8.1   Objectives of Cost Reduction and Cost Saving

Cost reduction and cost saving efforts are made with a view to achieve the following objectives :

- To avoid wasteful expenditure;
- To develop cost consciousness among the employees;

- To develop efficient operating procedures;
- To improve the overall efficiency of the office work.

19.8.2 Methods of Cost Reduction and Cost Saving

A wide variety of methods are available to effect cost saving and cost reduction in office operations. Some of the important methods are discussed below :

1. *Organisation and Methods (O & M) :* O & M explained earlier, is an attempt to maintain and improve office administration at a high level of efficiency. It tries to eliminate unnecessary operations and ensure a proper flow of work. It needs to be pointed out that for cost reduction, O & M should be built around the following principles:

    - Unnecessary operations should be eliminated.
    - Operations must be combined or simplified in order to secure effective performance.
    - All operations be arranged in a proper sequence so as to ensure a smooth flow of work.
    - The office work cycle must be as short as possible. Mechanising routine task may be the right step to achieve this purpose.

2. *Budgetary control :* A budget is a quantitative statement of objectives, plans and programmes of an enterprise. It states in exact terms (numerical or financial) what is expected to be achieved and at what cost. Budgetary control involves the preparation of budgets, continuous comparison of actual results with the budgeted ones, and revision of budgets in the light of the changed circumstances. A carefully prepared budget and its proper administration may help in controlling unnecessary expenditure to a large extent. While preparing office budget, all expenses on different accounts, such as telephone and telegraph, postage and mailing, stationery and supplies, printing, rent or taxes, filing costs, the supervisory payroll, the employee training, etc., must be classified under convenient headings. Estimates of these items must be prepared in advance before the commencement every year, based on the past experience, as well as, current requirements. This helps in making the office staff 'cost-conscious' as they are no supposed to exceed the budget limits. Next, the actual expenses under various headings are compared with the budgeted expenses and reasons for deviations are looked into carefully. This helps the management in holding office operations as nearly as possible, along the charted course, avoiding wastages of all kinds.

3. *Promotion cost -consciousness among employees :* The management must make employees realise the importance of carrying out tasks in an effective and economical manner. It must encourage the employees to come out with innovative ideas aimed at reducing costs. Due credit must be given to employees when suggestions are accepted. Attractive rewards and incentives would make the employees strive hard for newer and economical ways of doing things. These attempts will go a long way in making the employees cost-conscious all the time.

4. *Administrative vigilance and supervisory control :* There are certain office expenses which are avoidable, which can be cut down without impairing office efficiency. Overstaffing, extravagant use of messenger services, liberal overtime payment, improper purchase and use of office stationery and supplies, misuse of telephone services, are some of the important areas which could be kept under control through proper vigilance and supervisory control. If precise rules are laid down in the office manual on such matters, and if there is proper vigilance and control by supervisors, wastage and extravagance can

be reduced to the minimum. The following suggestions may be considered as means of bringing down office expenses, in respect of three important areas, to a reasonable level :

(a). *Stationery and Supplies*

- Use light-weight papers for office correspondence and records.
- Letterheads should be made available in sizes - half size for short letters and full size for normal letters.
- Use obsolete letterheads and office forms as scratch papers.
- Internal correspondence, make endorsement on the original letter rather than writing a separate reply.
- Avoid use of envelopes for internal mail.
- Eliminate double-colour ribbons or use them only when necessary. Turn the ribbon to ensure full use.
- Avoid extra file copies of correspondence.
- Standardise varieties of envelopes and use window envelopes. Also, put in one envelope all mail for the same destination.
- Establish centralised control of designing and printing all office forms.
- Systematise the collection, use or sale of waste paper. Waste paper can be shredded and used for packing purposes.
- Reduce the number of grades and varieties of pencils used; replace wooden pencils with dot pens.
- Economise the use of pins, clips, staples, tags, etc., by issuing them in packets.
- Maintain a detailed inventory of all office stationery and office supplies. Introduce a periodic check-up of all costly items. Prepare cost statements for each item of stationery used by individual clerks.
- Issue supplies in sufficient but not in excessive quantities.

(b). *Machinery and Equipment*

- Ensure regular maintenance of machinery and equipment. Arrange annual servicing by recognised agencies.
- Provide staggered working hours for the use of the same machine in different departments.
- Provide multiple shifts to ensure fuller utilisation of machines and equipment.
- Instruct all the employees in the careful and proper use of machines.
- Standardise machines and equipment.
- Mechanise the processes of a routine nature.
- Cover all machines at the end of work-day.

(c). *Layout and Services*

- Ensure maximum use of office space.
- Provide all equipment needed by the employees nearer to them to minimise their movement.
- Rearrange working space to secure maximum day light. Paint ceilings and walls in light shades.
- Designate persons responsible for putting off lights and fans after working hours.

- Also, designate persons responsible for disconnecting water coolers, air-conditioners, and heaters.
- Put restrictions on the use of the telephone for personal calls.

Check Your Progress C

1 State whether the following statements are True or False

    i) O & M is a systematic way of checking the effciency of office work

    ii) A forward and straight-line flow of work cusures smooth flow work .

    iii) Office work makes direct contribution to the achievement of organisational objectives.

    iv) Cost saving means miserliness.

    v) The terms 'budget' and budgetary control' are synonymous.

2   i) O & M includes everything which coniributes to the .... of office work.

    ii) O & M is a .... way of checking the .... of the office work.

    iii) Some people believe that the cost of the office work is ....

    iv) Many office managers think that whatever is being spent in the office work conventionally is .... and
....

    v) A budget is a .... statement of objectives, plans and programmes of an enterprise

19.9 LET US SUM UP

Work simplification aims at finding easier and better ways of performing office operations. It means using tools and equipment to produce the maximum efficiency at minimum cost. It ensures a smooth flow of work, improves performance and makes employees conscious about efficiency. While carrying out a programme of work simplification, it is necessary to secure cooperation of the employees. This can be achieved through communicating with the employees to help them see the logic of changing procedures and methods. Routine operations must be made simple, eliminating wasteful motions. Work-flow must be smooth and uninterrupted. Long and circuitous routes must be discarded. Lastly, forms, equipment and machines must be put to economical and effective use.·

Work simplification must be undertaken in a systematic manner, observing the following steps i) Initially, the problems causing trouble must be identified. The focus must be on areas where improvements could be effected. ii) The next step is to plan the assignment carefully by answering all relevant questions. iii) Data must be collected from primary, as well as, secondary sources. (iv) The next step is to analyse the fact: collected to find.out where and to what extent improvements can be made. v) A suitable plan for improving existing procedures or methods must then be made. At this stage, active cooperation of the employees must be sought. vi) Finally, the programme must be implemented by training personnel in new methods, effecting physical changes, introducing new forms, machines, etc. and recruiting new staff.

Organisation and Methods (O & M) refer to all such measures which may contribute to the efficiency of office work. It is through O & M that office procedures and methods are continuously improved and work simplification is achieved. O & M survey is, normally, conducted by an independent person. Big firms, however, depend on internal staff for carrying out O & M investigations. O

& M simplifies all operations. Fluctuations in work are avoided. A forward and straightline flow of work is maintained, paving the way for smooth performance of work. It improves communication among the organisational members, and compels them to learn new and improved ways of doing things.

The office cost reduction and cost saving aim at spending money wisely and rationally avoiding wastage of all kinds. There are various methods which may be adopted to effect cost reduction in office operations : i) O & M attempts to maintain and improve the office administration at a high level of efficiency ii) The budgetary control helps management in holding office operations close to the charted course, avoiding wastages of all kinds. iii) A third approach aims at promoting cost-consciousness among the employees, wherein they are encouraged to provide practical ideas and useful suggestions to improve procedures and methods. iv) Finally, cost reduction could also be achieved through proper administrative vigilance and supervisory control.

19.10 KEY WORDS

Budget: A quantitative statement of the objectives, plans and programmes of an enterprise.

Budgetary Control: Involves the preparation of budgets, continuous comparison of actual results with the budgeted ones, and revision of budgets in the light of changed circumstances.

Method : Sub-units of a procedure, indicating what steps are required to be taken while following the procedure.

Organisation and Methods (O & M): A systematic way of checking the efficiency of the office work.

Procedure: A specific way in which a piece of work is to be done.

Work Simplification: A systematic approach to eliminate wastage material, equipment, time, energy and space in the performance of office work.

19.11 ANSWERS TO CHECK YOUR PROGRESS

A 3 (i) False   (ii) True   (iii)True   (iv) False   (v) True

B 2 (i) co-operation   (ii) investment, status quo   (iii) effective, economical

(iv) understanding(v) forward, straight-line   (vi) systematic, organisation

C 1 (i) True   (ii) Tru   (iii) False   (iv) False   (v) False

2 (i) efficiency   (ii) systematic, efficiency(iii)unproductive
(iv) necessary, justified   (v) quantitative

19.12 TERMINAL QUESTIONS

1   What do you understand by work simplification ? Is it synonymous with systems and procedures improvement?

2   What are the objectives of carrying out a work simplification programme ? What benefits are likely to accrue if such a programme is carried out ?

3   What are the basic factors to be considered while planning a programme of work simplification ?

4   Outline the steps to be followed in planning for a programme of procedures and methods improvement. Indicate the importance of employees' participation in such a programme.

5   Explain what is O & M and state how it can streamline office administration.

6   "The purpose of Organisation and Methods is to secure maximum efficiency expert application of scientific methods of organisation". Explain.

7   What do you understand by 'office cost reduction and cost saving' ? What are the main objectives of the office cost reduction and cost saving ?

8   What do you understand by O & M ? What is the relevance of O & M in office cost reduction and cost saving ?

9   Discuss how budgetary control is essential for keeping down the office expenses of an organisation

10 What measures do you recommend for minimising wastage in respect of the following items in an office ?

i)   Stationery and Supplies,

ii) Machinery and Equipment,

iii) Layout and Services.

Note: These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

UNIT 20   PERSONNEL RELATIONS

Structure

UNIT 20.0   OBJECTIVES

After studying this unit, You should be able to:

- narrate the importance of the office personnel relations

- outline the factors determining the personnel relations

- state the significance of communication

- explain the importance of the office committees and suggestion systems and

- enumerate important welfare benefits.

20.1   INTRODUCTION

You have learnt that the success of an organisation mainly depends on how effectively the human resources are managed and utilized. With the right type of people in an organisation, its survival and growth are more assured. Personnel Management involves the selection of the right kind of staff, their training and placement in suitable positions and encouraging them to perform well through promotions and incentives. It also involves steps for retaining the interest and loyalty of the organisation. In short the personnel management tries to make the best use of the human resources in an organisation by winning their whole-hearted cooperation. In this unit. You will learn about the importance of the office personnel relations and the factors affecting the same.

20.2   IMPORTANCE OF OFFICE PERSONNEL RELATIONS

Both the ability and willingness of the employees greatly influence the efficiency of work in an office. The employees must be willing to serve the office to the best of their abilities. They must work cooperatively and also remain loyal to the interests of the organisation. Only then the maximum productivity and efficiency in the performance of office activities can be achieved. To achieve these, the office

manager must keep his staff satisfied by providing them a healthy and conducive work environment, consisting of good physical conditions, growth opportunities, incentives for better performance and sound leadership. However, in view of the peculiar nature of the human element, it is not easy to meet these ends. For example, some employees, may find fault with the physical environment while others may disapprove of the existing wage and incentive to the employees' discontent such as, lack of proper system to take note of the employees suggestion, inadequate welfare amenities, etc. The employees may question the style of functioning of the office manager as well. In most cases the basis of such accusations may be slippery. The office manager trying to develop harmonious relationship with his staff, must look into these factors and try to solve them amicably. He must try to strike a harmonious balance between the needs of his staff and the requirements of his organisation. The term 'Office Personnel Relations' refers to the maintenance of friction less relations among the employees, and between the employees and the management. It seeks to evolve and develop such relationships in the office where the employees are personally satisfied, and therefore, willing to contribute their best. Good personnel relations are important in an office because of two important reasons:

1 **Improves Performance:** Good personal relations help in attracting and retaining the best people in an office. Employees feel satisfied and are willing to contribute their best to the organisation. The working relationships among people should be considered good. This helps the employees to adjust to each other and work like well-knit team. On the whole, atmosphere should be conducive to result in good performance of the job.

2 **Sound Employe-Employee Relations:** Good personnel relations promote understanding between the office manager and the employees. The employees are encouraged to communicate their grievances, make suggestion and outline the steps required to improve performance. The management is willing to look into the problems of the employees sympathetically and solve them to the mutual benefits. Good personnel relations help the office manager move closer to employees. He can feel their pulse, initiate suitable steps, and win their hearts. In short, he can get along with people easily and get things done smoothly. In the absence of good personnel relations, it would be difficult, if not impossible, for him to keep his employees at their desks, doing office work in the right way.

20.3 FACTORS DETERMINING PERSONNEL RELATIONS

Harmonious relationships in an office do not emerge and develop automatically. In fact, they are products of careful managerial thinking and action. The management must be willing to communicate with employees freely and frankly. They must be willing to accept suggestion and allow the employees' participation in all important matters. Finally the management must also be willing to institute suitable welfare measures with a view to enlisting the services of the employees on a long-term basis. These steps would go a long way in fostering good personnel relations in an office. In short, the personnel relations in an office are dependent on three important facts:

- Good Communication
- Participative schemes such as, office committees and suggestion systems;
- Welfare Benefits

Let us examine these in detail.

20.4 SIGNIFICANCE OF COMMUNICATION

Communication is the process of transmitting information and understanding from one person to another. It is a way of reaching others with ideas, facts, thoughts and opinions. Communication always involves two persons, a sender and a receiver It takes place when the receiver understands what the sender wants to convey. If the idea received by the receiver is the one which was intended, communication has taken place.

Communication is important in the personnel relations too, as it serves as a bridge of understanding between the office manager and his employees. It helps the manager inform the staff about the policies, programmes, rules and regulations of the organisation from the appropriate properly. Good communication keeps the staff working in accordance with the plans and policies of the organisation. Communication also provides the right type of information to the office manger and enables him to consider the pros and cons before arriving at a specific decision. He can consult his employees, seek their opinions and suggestions and then take action in the light of responses. Without communication, it would be missing. however, such an atmosphere is not good for the impossible for the office manager to understand others and make them understand his views. Communication, thus, brings about a meeting of the minds, and builds mutual trust and understanding between the manager and the employees.

In the absence of effective communication system, the employees feel either left out or ignored. They are unaware of the programmes initiated by the management. They also cannot communicate their feelings, complaints, grievances or suggestions to the manger. In short, they cannot participate in organisational matters actively and achieve good results. Mutual trust and understanding between the office manager and his staff would be missing. However, such on atmosphere is not good for the office, as it ultimately creates bad blood between the management and the employees, vitiating personnel relations.

Good Communication is, thus vital to improve the personnel relatio as in an office. For effective communication, certain guiding factors should be kept in view and acted upon by the office manager.

1. *Clarify of Thought*: Before communicating any message, the matter should be clearly thougt of and exact purpose to be served by it must be kept in view.

2. *Clarity of Expression*: The communication must be conveyed in a simple language and straight-forward manner. The purpose must be to express not to impress.

3. *Employee Participation*: If necessary, the employees should be invited to participate in planning a communication-so as to assemble and analyze facts on the basis of which appropriate communication may be made.

4. *Supporting Action* : Policies, programmes, and instructions which are communicated should be followed by supportive actions, assignment of tasks, supervision and adequate rewards for superior efforts.

5. *Listening* : Listening to the viewpoints of the employees is as important for managers as communicating orders and instructions by them to the subordinates. To be effective, communication must interact actively, share information and act accordingly. The staff should be encouraged to con out openly and express their opinion frankly, regarding the problems arising out of the managerial decisions,

   Good communication is an important aspect of the office personnel relations. To improve understanding between the managers and the employees. several

participative techniques have been suggested over time. Application of these techniques enable the office staff to be more directly involved with the operations of the organisation. The ideal behind participation is to add meaning to work and allow the employees to become identified with it. The underlying assumption is that they have something valuable to offer and that their ideas, suggestions and opinions may be useful participation. It has a tonic effect on the psychology of the employees. They identify themselves with operations and contribute their best to improve the performance. Two participative methods have become quite popular in office, namely, office committees and suggestion system, which are discussed in sections 20.5 and 20.6 .

Check Your Progress A

1 Which of the following statements are True and which are False:

   i) The success of an organisation depends on how effectively the human resources are managed and utilized.

   ii) With the right type of people in an organisation, its survival and growth are more assured.

   iii) Good personnel relations help the management to come closer to the employees.

   iv) Communication is the process of transmitting information, and information alone form one person to another person.

   v) Participation in the organisational matters depreciates the importance of the employees in an organisation.

2 Fill in the blanks:

   i) Personnel Management tries to make the....................use of........................ in an organisation.

   ii) The .... and ....of the employees greatly influence the processing of work in an office.

   iii) Office personnel relations refer to the maintenance of.............................. relations among the employees and between ....and.................

   iv) Good personnel relations help in ....and .... the best people in office.

20.5 OFFICE COMMITTEES

One useful way of promoting two-way communication between the employees and the office manager is to set up an office committee. The office committee consists of members representing clerical staff, office supervisors and the office manager. The main purpose behind the office committee is to provide a forum where the office manager can consult the staff on matters of policy and discuss the problems relating to work and working conditions.

Office committees are, usually, required to deal with the matters pertaining to work and working conditions, viz., prevention of accidents, ensuring safety measures, providing welfare amenities, like canteen, drinking water, rest rooms, recreational facilities, etc. improvement in the methods of work and work rules, avoidance of wastages, questions relating to the employees discipline, training facilities, redressal of grievances. However, matters relating to wages, hours of work, bonus, etc., are not within the purview of this committee as it is only an advisory body. The decisions arrived at in the meetings of the office committee are not binding on the

management. However, the recommendations of such committees are, usually, accepted by the management as they are the result of joint consultation between representatives of the employees and the management.

The usefulness of the office committees, in most cases. depends on the attitude of the management and the employees. when the recommendations made by the office committees are accepted by the management, the employees automatically begin to view the committees as effective means to voice their viewpoint. Amicable solutions to the problems confronting the employees could be arrived at smoothly, without any friction, in such atmosphere. On the other hand, when the management tries to use these committees as devices to ward off threats of the unions, the deliberations serve no useful purpose. Discussions may continue for a painfully long time; recommencations may get diluted under pressure; some members could be effectevely silenced and so on. The office committees, therefore, should have continued blessings and consistent support from the management.

20.6 SUGGESTION SYSTEM

Under a suggestion system the employees are encouraged by the office manager to provide constructive and practical ideas to improve the working of the office. If the suggestions are accepted by the management, the employees receive cash rewards or other forms of financial reward. Generally, these suggestions may include ways to save time, to reduce waste, to improve quality, or to simplify procedures.

Suggestion system have motivational effect because they give the employees a sense of satisfaction of having contributed something worthwhile for the progress of the office. They promote upward communication between the management and the employees. They offer an excellent opportunity to the course of doing a particular job and bring the same to the notice of the office manager. The management, in turn could profit from the knowledge and experience of the employees willing to advance suggestions for improving work performance Suggestion systems, thus, may be as effective for the office as for the factory.

To be effective, the suggestion system must be carefully planned. Usually, the following procedure is advocated for administering the suggestion system in an office:

* Printed suggestion forms should be made available to the employees and kept along.with a suggestion box in a prominent place.
* A committee should examine all suggestions made by the employees, periodically.
* Each and every suggestion should be evaluated promptly with reasons for acceptance or rejection. This helps the employees to be better informed and convinced about the sincerity of the management and the fairness in the method of evaluation.
* The award must be worth while, so that, the employees are induced to come out with useful ideas.
* The management should, ultimately, be willing to put the accepted and award-winning ideas into practice. It must also publicise as to how the enterprise has benefited from the suggestions. This is, likely, to motivate others to look for improvements in work performance and come out with innovating ideas.

20.7 STAFF WELFARE

Staff Welfare, may be defined as, facilities provided by an employer for the intellectual, physical, moral and economic betterment of the employees, in addition to wages or salaries. The employers, these days, do not hesitate to invest huge amounts in welfare activities. They consider expenditure on staff welfare as a wise and necessary investment to improve the efficiency of the employees. By extending welfare benefits to the employees, they will be able to attract good-employees, increase the employees moral, reduce labour turnover, increase job satisfaction, and enhance organisational image among the employees. Some of the important welfare benefits extended to the office employees are:

20.7.1 Health and Safety Benefits

Employees health problems exist in all organisations, which may range from minor illness to serious injuries on the job, or elsewhere. Fortunately, office employees are not exposed to health hazards and work in relatively safe environments unlike industrial workers. This does not, however, mean that they are completely protected from accidents of all kinds. Accidents can do occur to the office employees. The most common type of accidents in the office are : fire from moving office machines, etc. careless throwing of lighted matches or cigarette stubs, and faulty wring of electrical equipments may cause fire. Slippery floors, faulty stairs, broken furniture, open drawers, and careless use of ladders and chairs may cause injury, Knives, blades or guillotine machines, when used carelessly, may result in cuts. Crowded, poorly lighted or poorly ventilated offices may increase safety hazards.

Having accepted that offices ore not totally free from accidents, it is necessary that suitable measures be taken for protecting the employees from these hazards. The following precautions are generally called for :

1. The office manager should promptly order rectification of conditions which cause accidents.

2. Safety arrangements should receive proper attention from the employees as well. The office manager must take positive steps to keep the staff alert and attentive to the safety precautions, like proper training of the operators of the office machines, adequate lightening of the stairways, regular servicing and overhauling of the electrical equipment, proper use of floor mattings, employing nonslippery finish for floors, etc.

3. Arrangements for providing first aid to the injured persons should be made. A well-equipped first-aid box be maintained for this purpose.

4. Adequate fire-fighting equipment should be maintained in the office premises and the employees should be given proper training in the use of such equipment.

5. To prevent accidents, safety rules must be formulated, intimated to the employees and enforced rigorously.

20.7.2 Medical Benefits

Most large organisations today provide several health care benefits to their employees. As part of such programme, employees are given paid medical leave, medical expenses incurred by the employees are reimbursed: and other benefits such as free hospitalisation, dental, optical and surgical care periodic health examination etc., are also extended. Exclusive health care centres are also maintained by some large undertakings. Sometimes, group insurance is a plan which provides a reasonable coverage for risks of lives of a number of employees, under one contract. The policy is issued on the lives of the group of employees, and in the event of death, the amount received from the insurance company is paid to

the amount received from the insurance company is paid to the deceased employees. Taken together, the medical benefits help an organisation to take care of the health problem of the employees and secure their services without interruption. The employees, in turn, are motivated to contribute their best to the organisation.

20.7.3 Recreational Benefits

The office employees, like other members of an organisation, need recreational facilities to relax and keep up their morale. Properly conducted recreational programmes help the employees relieve their tensions, frustrations, and boredom. Social interaction which is fostered by participation in indoor and out door games and other friendly contests produce mutual fellow feeling. Similarly, participation in occasional social parties, picnics and get-togethers help in knowing each other better. Such informal meetings develop the spirit of cooperation and understanding among the employees. To enrich the lives of employees further, management may also provide reading rooms, libraries, and facilities for organising cultural programmes, etc. Big organisations also maintain holiday homes in hill stations and other places of interest so that the employees may spend their vacations comfortably in healthy climate.

20.7.4 Canteen Housing and Transportation Benefits

The staff canteens usually offer meals, snacks, tea or coffee at subsidised rates. In most large organisations, the staff canteens are maintained by management as a fringe benefit. The employees do not have to go outside in search of meals or snacks. This, in turn, saves their time. They can get various good items in the canteen at concessional rates and in healthy surroundings. Such generous gestures from the management prompts the employees to identity themselves with the organisation and work with enthusiasm. Housing is one of the pressing problems in urban areas. In the absence of good housing accommodation at moderate rent, the employees may find it extremely difficult to make both ends meet. They are forced to live in unhealthy surroundings, seriously exposing themselves to all sorts of unhygienic conditions. Big organisations, therefore, try to cushion their employment offers to the employees with :

i)   Rent-free accommodation in company-owned buildings:

ii)   Attractive house-rent allowance to compensate inflationary pressures:

iii) Housing loans at reasonable rates of interest so that the employees can construct or purchase their own houses or flats.

Such offers help an organisation attract capable and qualified people. Besides, these avoid the costs of the employees turnover, to a large extent.

Transportation is yet another vexing problem in big cities. Employees using public transport service may find it difficult to report for duty punctually, particularly when they live in far off places. Apart from the loss of precious working time, the journey from places of residence to place or work in crowded buses employees might be too taxing. After such arduous journey daily, the employees might be too tired to take up their normal work To avaoid these problems and to keep the employees happy and contented, many offices arrange for subsidised transport for their employees to and from the office in company owned or hired - buses. Long term loans are also provided to the employees to own their own transport cars, scooters, cycles etc.

Provision of housing accommodation, canteens and transportation facilities help the employees live in healthy surroundings, bny good food at concessional rates, and reach the place of work in a comfortable manner. These benefits go a long way in promoting better personnel relations in an office.

20.7.5 Pension and Retirement Benefits

Economic security after retirement is a major source of worry for a retiring employee. To relieve the employee of such worries and to reward him for his long service, pension plans have come into existence. The employee covered by a pension plan, draws a monthly allowance (usually 40 to 50 per cent of the average pay during the last five or ten years) after the age of retirement till his death. The cost of such a plan is borne either wholly by the government, or the organisation, or partly by the organisation and partly by employees themselves. Sometimes, such plans also provide for family pensions, wherein the dependants of a retired person keep on getting pension even after his death.

Other Retirement Benefits include gratuity and contributory provident fund. The term gratuity refers to an ex-gratia payment of a few months salary (maximum, generally 15 months) to an employee in appreciation of his services. Under the scheme of contributory Provident fund, the employer and the employee contribute an equal amount every month. The total amount of provident fund contributions is deposited with the Provident Fund Commissioner regularly as per the rules of the Provident Fund Act. When the employee gets retirement from services, he gets the total amount along with interest.

Check Your Progress B

1   Which of the following statements are True and which are False ?

    i)   Office committees discuss matters relating to wages and bonus.

    ii)   Suggestion systems promote upward communication between the management and the employees.

    iii) Office employees work in relatively safe environment unlike industrial workers.

    iv)   Offices are free from accidents.

    v)   Group life insurance is a plan which provides coverage for the risk on the life of an individual.

2   Fill in the blanks:

    i)   Office Committees should have continued .... and consistent .... from the management.

    ii)   To be effective, the suggestion system must be .... planned.

    iii) Employees ....problems are inevitable in all the........................

    iv)   Recreational programmes help the employees relieve their ....and....................................

    v)   Housing is a .... problem in................. areas.

    vi)   Employees using ....transport may find it...................... to report for   duty ....

    vii) Economic .... after .... is a major source of worry for a retiring employee.

20.8   LET US SUM UP

The success of an organisation depends of great deal on how effectively the human resources are managed and utilized. It is necessary to maintain harmonious relations among the employees, and between the employees and the management so as to minimise conflicts and achieve the goals of an organisation efficiently. Besides,

harmonious personnel relations help attract and retain the best brains and in maintaining high morale. However, this is not an easy job. It depends among other things, on three important factors, viz, good communication, participative schemes, such as office committees and suggestion system and welfare plans.

Communication is the process of transmitting information and understanding from one person to another. Good communication is important in the personnel relations as it serves as a bridge of understanding between the office manager and his employees. Mutual trust and understanding develop spontaneously when the office manager allows his employees to come out with constructive ideas and suggestions.

Office Committees are useful devices to promote two-way communication between the office manager and his staff. Issues relating to the employee welfare, grievances, and discipline, may be put to a free and frank discussion in committee meetings. Office committees, when handled properly, help the employees to come out with useful ideas. Another participative scheme which may be adopted to improve the performance of the employees in an office is the Suggestion System wherein the employees are given the freedom to advance practical suggestions, air grievances and ventilate problems relating to their work and working conditions, To be effective, the suggestion system must be based an careful planning.

Welfare amenities in the form of health and safety benefits: medical and recreational benefits: canteen, housing and transportation benefits: and pension and retirement benefits are offered to the employees in most modern organisations. The primary purpose behind such benefits is to help the employees perform better and enjoy a richer and fuller life, with long-run benefits to the organisation.

20.9 KEY WORDS

Communication: The process of transmitting information and understanding from one person to another.

Gratuity: An ex-gratia payment of a few months salary made by an employer to an employee in appreciation of his services.

Office Committee: A committee consisting of representatives of clerical and administrative staff formed to promote two-way communication between the employees and the office manager.

Pension: A monthly allowance granted to an employee after his retirement from service.

Personnel Management: Involves selection of right kinds of staff, their training and placement in suitable positions, and encouraging them through incentives to perform well.

Personnel Relations: The maintenance of frictionless relations among the employees, and between the employees and the management.

Staff Welfare : Facilities provided by an employer for the intellectual, physical, moral and economic betterment of the employees, which is in addition to wages or salaries,

Suggestion System : A scheme where the employees are encouraged to provide constructive and practical ideas to improve the working of an office.

20.10 ANSWERS TO CHECK YOUR PROGRESS

A   1   (i) True   (ii) True   (iii) True   (iv) False   (v) False

2   (i) best, human resources (ii) ability, willingness (iii) frictionless, employees, management (iv) attracting, retaining

B 1   (i) False (ii) True (iii) True (iv) False (v) False

    2   (i) blessings, support (ii) carefully (iii) health organisations, (iv) tensions, frustrations, boredom (v) pressing, urban (vi) public, difficult punctually (vii) security, retirement.

20.11 TERMINAL QUESTIONS

Define personnel relations. State the importance of maintaining good personnel relations in an office.

2   Mention, in brief, the various factors influencing good office personnel relations.

3   How can communication between the office manager and his employees help in solving personnel problems in the office ?

4   Define Office Committees. What are the reasons for the creations of such committees? Also explain the conditions on which the successful operation of such committees depend.

5   What benefits, direct and indirect, could the management expect to gain from the use of the employees' suggestion system ? What benefits are employees likely to obtain from such a system ?

6   "Suggestion systems are used in many offices as a means to promote upward communication between the employees and the management". Comment.

7   What do you understand by welfare ? List the important staff welfare measures that are usually extended to employees in a modern office.

8   Write short notes on:

- Health and Safety Benefits
- Medical benefits
- Retirement Benefits
- Recreational Benifits

> Note: These questions will help you in understanding this unit better. Try to answer these questions but do not send your answers to the University. These are for your practice only.

SOME USEFUL BOOKS

Arora, S.P. 1990, *Office Organisation and Management*. Vikas Publishing House Pvt. Ltd, New Delhi.

Chopra, R.K. 1985, *Office Organisation and Management*, Himalaya Publishing House, Delhi 1986.

Mills, Geoffrey and Standingford, Oliver, 1984, *Office Administration*, Pitman Publishing Ltd, London.

Reddy, P. N. and Appannaih, H. R. 1990, *Office Organisation and Management*, Himalaya Publishing House, Bombay.

Singh S.P. and Singh B., 1987, *Office Management and Secretarial Practice*. Gyan Publishing House, Delhi.