Block

2

LIBRARY FUNCTIONS AND OPERATIONS

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BLOCK 2 LIBRARY FUNCTIONS AND OPERATIONS

Introduction

This Block deals with routines and fundamentals of librarianship. There are five units devoted respectively to basic housekeeping operations, physical infrastructure, maintenance of library including preservation and disaster management. **Unit 5** entitled "Basic Housekeeping Operations" the main emphasis of this unit is on acquisition of sources.

Sources acquired by a library need certain processing before they are released for use. The **Unit 6** deals with all these aspects. The Unit also deals with *circulation section* of libraries and enumerates major functions of charging and discharging of materials, regulating/ controlling the system with reservation, renewal and recall, maintaining records of use of books.

Unit 7 is mainly concerned with planning and building physical infrastructure in general and library building and furniture in particular. Building is required to provide space not only for users, but also for stacking resources and for library staff to work and deliver services to customers. The frequent occurrences of various disasters have now necessitated adequate provision for preventive measures and need for insurance as an essential part of library building maintenance.

Unit 8 discusses maintenance and preservation of library materials. The causes of deterioration of library material are both internal as well as external. Various preventive measures have been suggested to check the deterioration and damage to library resources. Maintenance of library material is an important activity of library under overall collection management. Without maintenance of materials in an orderly manner, identification of required book by users shall become a daunting job. Library stock verification is yet another activity of collection management. Therefore the Unit also discusses these aspects in detail.

Lastly, **Unit 9** exclusively discusses the disaster management. Disasters are disruption or damage to the library by natural factors such as flood or earthquake or due to negligence or deliberate action of human beings such as war, arson and theft. Man-made disasters can be prevented and natural disasters have to be courageously faced with meticulous planning to mitigate the situation. Disaster management has now become an integral part of library management. This Unit gives you history of disasters, causes of disasters, national and international awareness about disasters, planning disaster-management and preventive security measures.

UNIT 5   BASIC HOUSEKEEPING OPERATIONS PART-1

Structure

5.0   OBJECTIVES

Acquisition of resources is one of the main functions of a library. The routine begins with selection of resources as per needs, selection of supplier, preparation of indent and placing order, receipt of the consignment and entering the materials received in a register or in the relevant module of the computer file. It requires much expertise and knowledge about the market for resources, as well as terms and conditions of supply. Care is also required to avoid duplication and not to order what is not needed.

After reading this Unit, you will be able to:

- describe the process of preparing indent and placing order;

- explain the criteria for selection of supplier;

- describe the various methods available for acquisition; and

- highlight accession of material and the administrative functions of accession record.

5.1 INTRODUCTION

Libraries acquire information sources in the form of books, serials and electronic publications, organise them in a systematic manner for use, with provision for their management including their preservation. In order to maintain the collection that is relevant to the needs of the user community, the collection is replenished with addition of publications containing new ideas as they become available in the market. Procurement of information sources or acquisition therefore holds a place of central importance in libraries. The basic elements of the acquisition process are, determining what information resources are needed, identifying the appropriate items for acquisition from sources of selection, acquiring the items and adding the same to the existing stock through entering them in a stock register called accession register.

Till the third decade of the 20th century, library collection normally comprised only books, both printed and hand written called manuscript. Private papers of eminent personalities, and official records, court documents, etc. were the concern of archives. Microfilms joined library collection first, to change the character of collection, followed by audio-visuals and then by electronic publications, both online and offline. With the arrival of the electronic sources the structure and operations of the acquisition unit underwent a major change. The routines of the acquisition section now required input from persons not only from acquisition section but even persons from outside the library with technological as well as legal knowledge.

Changing Scenario of Acquisition

Increasing share of electronic publications in library collection has brought change in acquisition routines in libraries. Electronic publications are different in character from printed monographs in many respects. The most important difference is that these are not acquired but only granted license for right of access to the information. Further, the right can be exercised only if the library has compatible hardware for it. Electronic publications first appeared in the form of CD-ROM. With the advent of Internet the situation underwent sea change. The Web based information communication facility has dispensed with the need to mount the database on a central computer. But now the right to access to the content has become more complicated. The databases have more than one price models depending upon the number of users, the place of access, the time span/ period for access, the category of users, the right to take print out or download, etc. These details are covered under the terms of a license and are subject to negotiation. The access right, in case of periodicals is only for the subscription period. Once the subscription is over the library looses the right of access to the database even for the period for which it had paid subscription. The library has to find out before subscription, the archiving facility of the e-journal. These complications call for decision for acquisition or access to be taken not by librarian alone or in consultation with colleagues in the library but by a group of people comprising subject expert, reference librarian, and technology expert for understanding the needed hardware, etc.

The access cost also has shot up and smaller libraries are finding it difficult to provide their users the services with latest information. Faced with the steep rise in subscription to electronic sources in 1990s libraries thought of developing

cooperative arrangement for subscription to databases. The idea was to avoid duplication in subscription in the same area. But with the emergence of the Web, the virtual literature could also be shared, this gave birth to cooperative acquisition, called consortium. According to Glenda A. Thornton "consortia provide three basic functions: sharing of physical resources, providing connections to Internet and the www and providing access to electronic resources. Consortia are able to obtain more favorable pricing for products than an individual library can get; greater access to core materials for smaller libraries within the group; improved level of service and convenience to users previously excluded from access to expensive resources".

5.2 ACQUISITION PROCESS

The process of acquisition of a library comprises of the following:

- ascertaining the needs of the users,
- selection of the documents,
- procurement of the documents,
- accessioning of the documents.

In organising its routines the objectives before the Acquisition section are to:

- acquire material as quickly as possible,
- maintain high level of accuracy at all levels of procedure,
- the work process simple to achieve the lowest possible unit cost,
- develop working relationships with other library units and also with vendors.

Self Check Exercise

Note: i)   Write your answers in the space given below.

ii) Check your answers with the answers given at the end of this Unit.

1)   Describe in brief the impact of electronic publications on acquisition.

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2)   State the objectives of the acquisition section of a library.

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5.2.1 Acquisition of Documents

Acquisition function is performed by libraries to satisfy the information needs of library users. The job of this section is to identify the users' needs, and the sources appropriate for satisfying the needs. The documents suitable for the function are identified in the selection tools, the sources are selected and acquired with the finance made available for the purpose. The libraries fall under three broad categories; academic, public and special library. Users needs are affected by the category of library where the user is looking for the information. To ascertain the information needs of user group two methods, Direct Method and Indirect Method are available.

Direct Method of collecting information on users need includes:

• interview of the users,

• through circulation of questionnaire among the users,

• through suggestions, in writing, received from users.

Indirect Method includes study of:

• goals and mission of the parent body,

• courses of study and research areas and projects,

• records at reference desk about information and references sought,

• research scholars profiles,

• history culture and literatures of the user community,

• circulation and reading room records, and

• subject wise core lists in various disciplines.

Under indirect methods, some studies are specific to a particular category of library. For example study of history and culture is more relevant to public library users, while study of research profile is relevant to academic and special libraries.

5.2.2 Selection Principles

Selection principles have been evolved which serve as guides for selecting documents for library. The followings are some well known principles:

Drury's Principles: Drury described his principles in his book, *Book Selection,* published by ALA in 1930. It is a list of 21 points. The gist of his principles is that the aim of selection should be "to provide the right book to the right reader at the right time".

Dewey's Principles: Melvil Dewey suggested that in selecting document the librarian should see that the document is "the best reading for the largest number at the least cost".

Ranganathan's Principles: According to Dr. S.R. Ranganathan, documents fall under three categories: documents which are of basic or of primary interest to the users; documents which may be required, at one time or other, to supplement the basic documents, and documents which are of no relevance to the primary area of work. The first category is called *umbral* documents, the second is called *penumbral* documents and the third is called *alien* documents. The library should

make comprehensive collection of umbral documents, selective acquisition of penumbral documents and depend on other libraries for satisfying needs for documents of alien nature.

Selection of sources is a very delicate issue and involves decisions which often are termed as personal bias. However, theoretically the job is a team work and the team is comprised of library staff, members of user community and the library authority. The relative role of the three is determined by the nature of library. In public library the authorities play a dominant role, while in academic library it is the user community which finalises the resource selected for acquisition. In actual practice however it is librarian with his regular contact with the user community, and with knowledge of available resources in the market who plays the main role in collection building. Selection is part of overall collection management process and must be viewed in this perspective and requires professional competence which develops by regular study of literature concerning the principles and practices of collection management, selection methods, publishing trend, reviewing media and acquisition practices.

5.2.3 Selection Tools

Selection tools are an important category of documents which are kept at hand in the acquisition section. These are regularly updated by addition of new tools as and when they become available. These are available, both for print and e-sources.

Categories of Selection Tools

Sl. No.	Sources for Selection of New Titles	Examples
1	Publishers Catalogues /Book Sellers Catalogue	• *Current Catalogs: Macmillan* • *Catalogue of Oxford University Press*
2	Book Trade Journals	• *Publisher Weekly* • *Bookseller*
3	Book Reviewing Journals	• *Book Review Literary Trust (New Delhi)* • *Times Literary Supplement (TLS) (London)*
4	Abstracting Journals	*International Political Science Abstracts*
5	National Bibliographies	• *Indian National Bibliography (INB)* • *British National Bibliography (BNB)*
6	Survey Type Bibliographies	*Unesco International Bibliography of the Social Sciences :Economics*
7	Serials Directory	• *Ulrich's International Periodicals Directory*

		• *Union List of Serials in Libraries of the United States and Canada*
8	Bibliographies of Basic Books	McClung, P. A. *Selection of Library Materials in the Humanities, Social Sciences and Sciences, ALA, 1985.*
9	Sources for Bibliographic Verification	• *Books in Print* • *Indian Books in Print*
10	Printed Catalogues of Major Libraries	• Library of Congress *National Union Catalogue* • The British Library *General Catalogue of Printed Books. London, Bingley, 1980-87. 360 volumes.* • *India, National Library. Author Catalogue of Printed Books in European Languages. Calcutta, The National Library, 1953. 10 v.*
11	Electronic Sources	• Library of Congress CSD Alert Service • Association of Research Libraries: *Directory of Electronic Journals, News Letters and Academic Discussion Lists* • *Lexis-Nexis, EBSCO* • *Gale Directory of Databases*
12	Publishers and Book sellers Directory	*All India Book Trade Directory*

5.2.4   Financial Resources for Acquisition

Financial resources for acquisition are sanctioned to library by the Library Authority. But the proposal for the budgetary requirement normally originates from the library. Staff at reference desk, reading room and serials section keeps recording unfulfilled information demands/requirements and suggestions of the user community. Suggestions from users are a regular phenomenon; seminars and conferences also serve as a source for collecting information about possible requirements for resources. In this way libraries have a database. The budget proposal based on the need is prepared in two parts:

i)   Overall amount required for a year, and

ii) Department wise/subject wise allocation of total amount. The calculation begins with

  a)   Previous year's actual expenditure,

  b)   Provision for inflation rate,

  c)   Provision for new courses proposed to be launched in the new session, proposal for a new extension service, need for an additional branch, etc.

d) Provision for upward revision in subscription rates of certain serial publications or addition of new titles for subscription,

e) Provision for addition of electronic publications.

Budget preparation poses problem when we add electronic materials in the acquisition list. There are more than one pricing models for e-resources depending on the terms of license and provision for archiving of e-resources, etc. Further these terms are negotiable. Similarly preparing estimate for serial subscription also poses problems. In case of renewal one has to check the new rates. In case of cancellation of a title in view of its access as e-resource, one has to be sure about existence of archiving facility for the electronic material. Evaluation of electronic sources is another vexing problem area.

Department wise allocation is proposed, taking into account number of courses in departments, size of students and teachers, average price of publication in the subject, ratio between monographs and serials needed in a subject, past utilisation position in the department, and age of the department i.e. whether the department is old one or has been setup recently. There should be a separate provision in budget for general or multidisciplinary area. Similarly some amount should be provided for acquisition of reference material.

Accounting of Sanctioned Budget

Proper utilisation of budget is an essential requirement of financial administration of the library. Accounting helps library keep track of expenditure under each head, ensures against misappropriation and maladjustment and alerts heads of various departments about over or under expenditure in their subject. It also helps library against duplicate payment to any firm. The following registers are maintained for accounting purposes:

- General invoice register,
- Accounts register, and
- Monthly statements of expenditure register.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3) State the points to be considered while preparing budget estimate for Acquisition section.

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5.2.5 Personnel for Selection of Sources

Clayton and Gorman have identified following specific qualities in the person responsible for selection work.

The person doing selection work:

- Must have an intimate knowledge of the library's purpose its collections and its user group,

- Should have developed a sound understanding of how the publishing industry and the book trade operate including how library material of all types and in all formats are generated, distributed and sold,

- Should be fully familiar with the publishing policies, advertising media, publicity outlets, names of senior editors and general reliability of those publishers whose lists are more relevant to the library's collection management requirement,

- Should become fully familiar with the key reviewing media and should read reviews regularly to get critical opinions on books, etc.,

- Should be fully aware of trade and national bibliographies and their equivalent online sources, and become fully aware of their strength and weaknesses,

- Should always be prepared to make well-informed, independent judgments regarding selection of materials for one's library.

5.2.6 Ordering Processes

Ordering process in manual system includes three routines; pre-order work, placing of order and receipt of supply.

Pre-order work

All the selection cards/slips for items which have been identified for placing order are checked:

- For accuracy bibliographical details and filling up missing bibliographical details filled up,

- For duplication with records of books on order, books received and awaiting accession and materials available in the library in print as well as in electronic form,

- For confirmation, if a duplicate copy is really needed although a copy is already available.

Order work

Before forwarding order must be checked for correctness of information of ordered items, in respect of:

- clarification on terms and conditions of supply,

- clarification on mode of dispatch of consignment by supplier,

- any specific requirement in invoice, etc. These precautions assume double importance in case of serials.

Receipt of Consignment

The first job on receipt is to check the consignment for:

- Correct delivery, for identifying defective copy in consignment and for duplicate or short supply.

- Missing pages/issues (It is more important in case of serials where unless prompt action is taken the missing issue may not be replaced).

The next job is accession/registration (in case of periodical issue), in relevant records materials received from the suppliers. This has been explained under accession routines.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4) Describe the routines of ordering process.

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5.3 PROBLEMS IN ACQUISITION OF SOURCES

Demand, supply and finance are the three major factors governing acquisition work. Each one of these has its important role in decision making for acquisition. In the case of assessing demand the librarian has to make a distinction between want and demand or the need of the library in broader perspective of the library's requirements. The library is granted a specified amount for acquisition. The budgetary provision has rarely been a match to the needs for resources for the library. The unpredictability of the price trend in the book market and the unforeseen needs for resources which always come in the way and create funds problem are some issues which need resolution.

Problems in Acquisition of Sources

A) Common Problems

i) Constraints of Financial Resources

ii) Selection of Suppliers

- Publishers vs. Agents

- Independent Orders vs. Order through Consortium

- On line Booksellers

B) Problems Specific to Indian libraries

- Indian book market

- Acquisition of Foreign publications

- Acquisition of Indian publications

C) Terms and Conditions of Supply

A) **Common Problems**

i) Constraints of Financial Resources

Funds available to libraries for acquisition have been a major constraint all over the world. One reason is the unpredictability of exact nature of the demand for the sources. In the middle of the year a new proposal props up, marked most urgent, and the balance in budget is lost. One can only assess the needs and average cost of the required material which may often be different and on the higher side in actual case. The allocated amount based on the proposal worked out on current prices is static whereas prices keep on increasing. Apart from these reasons the library budget is the softest target for slashing downward in periods of financial crisis in the parent body. The budget is also affected if the country's exchange rate *vis-a-vis* foreign currency dips downward.

ii) Selection of Suppliers

A successful plan of acquisition is dependent upon selection of resourceful and dependable team of suppliers. In certain cases payments to suppliers are to be made in advance e.g. official publications, periodical subscriptions, etc. The library must ensure credibility of the firms before advance payment is made. Credibility is the sum total of resourcefulness, efficiency in execution of order and evidence of fair dealing by the firm. In case of e-resources an additional dimension is availability in the firm staff capable of assistance to the library to resolve issues of compatibility and accessibility to the data. Speed and percentage of items supplied out of ordered items are also taken into consideration. The library has, in many cases, to choose in placing order for books/subscription for periodicals, between a publisher and agent/supplier. Both parties have their plus and minus points. In taking decision the library may opt one firm as the major supplier and supplement others for the remaining purchases. The best course would be to have a mix of sources for its acquisition of needed documents.

a) **Choice between Publishers and Agents/Suppliers**

Advantages of direct dealing with publishers

- Supply is fast and also economical as there is no commission for intermediaries.

- Replacement of missing item or defective items is prompt.

- Advance payment, if any, is relatively safer.

- Evaluation of quality of e-resources is easy as statistics about number of hits are available.

- Problem of interruption in access to data base is resolved quickly with access to technical consultant at the publishing firm and access to back issues of periodicals is available on the server of subscribed titles.

- Some publishers don't work through agents.

- Problems of e-resources about various permutations in licensing terms for access to suit individual needs are easily resolved.

- Need for adding additional titles in the existing subscription lists, for multiyear contract, or for contract with a fixed inflation rate are favorably considered.

Disadvantages of direct dealing with publishers

Direct dealing with publishers is not all benefits only. There are many a problems that the libraries face if they deal directly with publishers for acquisition of sources. Some of these are as follows:

• Library will have to deal with more than one publishers giving rise to more file work, more correspondence, more staff time and more expenditure on postage, etc.

• Agents give bulk business to a publisher and therefore get priority in attention over libraries.

• In case of problems arising in e-resources, the staff will have to deal with various publishers.

• Often publishers have their own search engines and controlled vocabulary and service staff will have to work with each one of them.

• As individual customer library will have less leverage in negotiating terms of license for access.

Advantages of dealing with agents/suppliers

In view of these problems library find it much convenient to process orders for monograph as well as periodicals and databases through an agent. Besides, there are many more plus points in favor of processing orders through an agent.

• Dealing with one point leads to saving in staff time, expenses on postage and cartage.

• Since agents provide business on behalf of more customers they get prompt response from publishers for any problem which they pass on to their clientele.

• Due to better market knowledge agents can give efficient service in processing rush orders.

• As bulk order provider they are in strong position in securing better terms for license agreement for e-resources.

• Over the years agents build up various types of information on databases and provide information on renewal, change in subscription rates, bibliographic information on periodicals, URL and various pricing models and thus help in selecting new serial titles.

• Advance information about likely changes in subscription rates provided by agents helps libraries in adjusting their serial's budget.

• Now a day's agent also attend professional conferences and in this way develop better understanding about organising their services to libraries.

• Some agents/suppliers specialise in periodical subscription work and therefore many libraries prefer to subscribe periodicals through agent only.

Disadvantages of acquisition through agent/ suppliers

• Agents while renewing periodical subscription raise bills at old rates and subsequently raise supplementary bill. This raises problem of adjustment in library budget.

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- Information about non-receipt of an issue or receipt of defective copy of a book, often reaches the publisher late after the lapse of stipulated time resulting in non-replacement of the same.

- Failure of agents business puts library advance payment often in jeopardy.

- Midway change of agent creates many problems for the library in restoring access to the e-resources:

    i)   Library has to clarify to the publisher that it is only change of agent and not a new subscription requiring fresh negotiation for license.

    ii) It may result into losing a few issues of the journal/access to the databases.

    iii) The library will need subscription number and other data from the former agent to provide it to the new agent or to the publisher.

    iv) In case of change of agent, the library looses use statistics for e-resources as the same is not available with the new agent.

- Agents are often reluctant to supply 'no discount' or 'short discount' books.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

5)   List advantages of acquisition through agents.

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b)   **Consortium vs. Independent Acquisition**

Consortium is a form of cooperative arrangement for acquisition of e-resources emerged in wake of steep rise in rates of periodical subscription towards the closing years of the last century. By routing subscription through consortium, libraries get access to greater number of sources. Through consortium they get:

- More leverage in negotiation about terms of license.

- Offer of improved service to their clientele, as they get access to more resources and better support services.

However consortium often poses problems for individual libraries. The libraries have often to accept sources of marginal value to their own clientele at the cost of sources of more local importance. Yet another problem in joining consortium is that considerable portion of budget becomes committed to consortium, leaving the library with limited fund to meet its local needs. Databases purchased through consortia often lack consistency in depth, breadth or extent of full text coverage.

c)   **Online Booksellers**

Digitisation of already published titles has thrown up a new breed of suppliers called online suppliers. *Amazon. Com.* is one of the most well known firms in

this category. In countries where libraries have corporate credit card can deal with such firms. However the libraries must know that some online suppliers are only virtual shop keepers. They are and not stockiest of digital collection. Online purchase also creates problem of maintaining expenditure record to avoid over expenditure.

Self Check Exercise

Note: i)   Write your answer in the space given below.

   ii)   Check your answer with the answers given at the end of this Unit.

6)   State benefits and problems of acquisition through consortium.

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B)   **Problems Specific to Indian Libraries**

i)   **Book Market**

   a)   Far-Off Book Markets

      India is a vast country. But all areas are not equally developed with respect to book markets. Major publishers and stockiest are concentrated in a few metropolitan cities. Libraries face major problem in getting prompt information about new publications and receipt of consignment of books ordered to Indian or Foreign publishers. The problem is greatly eased with the Internet and e-resources.

   b)   Problem of Trade Discount

      Unlike foreign countries in India there is no agreement between the book trade and the library associations about uniform trade discount resulting into variation in rates and thereby creating:

      •   distrust among authorities towards librarians, and

      •   potential situation of acquisition of unwanted materials in libraries.

ii)   **Problem of Acquiring Foreign (Non-English) Language Publications**

   Libraries building up collection in European and Asian language books face real problem as there are hardly any stockiest dealing in these languages. Most of the European and Asian suppliers demand advance payment. Arranging for advance payment is a cumbersome and risky process which few librarians take courage to follow.

iii)   **Acquisition of Indian publications**

   a)   Problem with Central and State Government Publications

      Selection tools for Central and State government publications are not available on time. The Government Publications departments are yet to organise their sales system on professional lines.

b) Problem of Indian Language Publications

Indian Language publishers have not succeeded in bringing out college level books in social sciences, humanities and sciences. Libraries acquire books mostly in English language which remain unutilised. Language publications create selection problem due to non-availability of selection tools staff.

c) Problem of Indian Periodical Publications

Acquisition of Indian periodicals presents serious problem due to non availability of directory of periodicals on regular basis. Those few which are available are outdated. These were compiled more as an academic effort by librarians than a commercial effort.

d) Out-of-Print Book Problem

There are few firms dealing in out-of-print books. Even those few who specialise in supply of old books are more interested in stocking books of art or only rare books. General books not available in publishers' stock are difficult to acquire from these dealers.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with the answers given at end of this Unit.

7)   State problems specific to Indian libraries.

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C) **Terms and Conditions of Supply**

Negotiation about terms and conditions of supply is another area that needs attention in deciding about the suppliers for the library. In case of printed sources points of negotiations are:

i)   trade discount,

ii)   foreign exchange conversion rates, and

iii)   conditions of supply.

In case of electronic sources whether offline or online, the agreement involves very elaborate description and calls for negotiation which need help from legal and technology experts.

i)   **Trade Discount**

Printed materials excluding periodicals are supplied to libraries at a discount over printed price. In most of the Western countries where library associations and publishers and booksellers associations are well organised, the two have negotiated a discount rate which is followed by libraries all over the country.

In England, for example, is the Net Book Agreement Instrument signed in 1929 (revised in 1933) by the Library Association, the Publisher Association and the Association of Booksellers of Great Britain and Ireland.

In our country in the eighties of the last century when the country was facing foreign exchange crisis, bank rates for foreign currencies had become very volatile. To help the situation the ILA (under the president ship of shri D.R.Kalia) sponsored a Good Offices Committee composed of library and trade representatives and nominees of the UGC and the Ministry of Finance. The Committee used to meet normally once in a month to decide exchange rates as well as discount rates. These were followed by most of the libraries in the country. In course of time the situation of foreign exchange improved and became more stable. At around this time certain objections were raised against the UGC and The Ministry of Finance officials taking part in a purely business matter and they withdrew from the Committee. Their withdrawal from the Committee lost its effectiveness and gradually it became defunct as far as the decision regarding discount rate was concerned. In Delhi itself the two older universities are following two different rates of discount. The Delhi University has fixed 15% discount on all books and 30% for books published three years back excluding rare books or books acquired on firm order. In Jamia Millia Islamia a uniform rate of 25% has been fixed by the authorities. The Government libraries are purchasing books on 10% for foreign books and 15% for Indian publications. This has given rise to a situation of total disarray about discount rates to libraries in the country.

ii) **Foreign Currency Exchange Rate**

With improvement in foreign exchange position it has ceased to be an issue for decision. The bank rates prevailing on the bill date are the norms on which exchange rates are determined.

iii) **Conditions of Supply**

Conditions of supply include the latest edition of the items supplied, its physical condition, the timely supply, willingness to replace defective copy, correct publisher price, etc. Normally these are part of the ethics of trade and generally no written agreement is signed for these. But acquisition of material where advance payment is involved such as subscription of periodicals, and/or online electronic sources, a written agreement is essential. Such agreements spell all the various responsibilities that both the parties have to take regarding receipt and supply of the document. The agreement for accessing online sources includes the following details:

- Number and category of person to be allowed access,

- time period for access, place from where access is permitted,

- archiving facility for the sources for which payments have been made and when subscription has been cancelled,

- extent of software hardware documentation,

- provision of updating if data is in CD, and

- Clarification on copyright.

Note: i)   Write your answer in the space given below.

   ii)   Check your answer with the answers given at the end of this Unit.

8)   Give brief account of terms and conditions of supply.

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5.4   DOCUMENT PROCUREMENT METHODS

Libraries procure documents through various means. We may group these means into two broad categories: a) Acquisition through payment, and b) Acquisition without making payment. Acquisition through payment can be further grouped under monetary payment and payment made in kind.

1)   Acquisition through Monetary Payment

   i)   Standing vendor method,

   ii)   Books on approval method,

   iii)   Regular order to publisher/agent/open purchase,

   iv)   Standing order method,

   v)   Blanket order method,

   vi)   Tender system, Quotation method and Dealer Library Plan.

2)   Acquisition through Payment in Kind

   i)   Acquisition under Institutional Membership.

   ii)   Acquisition under Exchange Arrangement.

3)   Acquisition through Gift, Donation and Deposit

4)   Free Access Electronic Sources

5.4.1   Acquisition through Monetary Payment

i)   **Standing vendor**

   Under the method the library selects one or two firms for a given period to supply all its requirements. The selection is done after inviting quotations through a tender containing the terms and conditions for supply. The firm offering the most favourable terms is approved for the specified period. All needed resources are acquired through the firm .Often clever firms out bid others by offering maximum rate of discount and get approved. In actual practice the firms fail to supply short-discount, no-discount and other books which involve more effort in procurement. The system is therefore not helpful for major libraries in building up its collection.

The system is however liked because it saves library from much file work. Further the firm develops understanding of the needs of the library and goes out of way to meet its requirements. Such arrangement is more appropriate for libraries of research institutes with limited area of their information needs.

ii) Books on Approval

Under approval method local firms are encouraged to bring books to library from new consignments on a fixed day in the month or week and leave them with the library/selection authority on approval. It gives library opportunity to invite persons authorised for selection for close look in the books and identify those appropriate for their subjects. The library is saved from selecting books from printed catalogues and preparing list for approval by the subject expert. It also helps library getting books promptly. But the system can function successfully only in metropolitan cities with good number of stockiest and publishers. Publishers are reluctant to send books on approval and prefer to supply only against firm order. However local publisher cum stockiest may agree to this method. In book fairs usually there is more than one spot buyer for the same book, and booksellers/ publishers are reluctant to take risk of sending books on approval as against counter sale.

iii) Direct order to Publisher

Acquisition through direct order to publishers is the most important method for building up collection. The library prepares its list of requirement from publishers catalogues and after approval of the appropriate authority places order direct to publishers. Books are received more promptly especially foreign books which, may reach with much delay if ordered through an agent. The method involves more file work. Problem in acquisition from foreign publishers arises during crisis in foreign exchange when library has to acquire an import license. Direct method is also used in making purchase during book fairs when most of the major publishers bring their stock in the fair. Librarians come along with members of the Book Selection Committee for each faculty/public library and decisions for purchase are taken on the spot.

iv) Standing Order

Standing order method is used to acquire publications under the following categories:

i)   Books published under a series with regular interval,

ii) Multivolume books where each volume is published with time lag,

iii) Books published in parts till such time all the parts are complete.

Payments for standing order are made on receipt of material only and order automatically gets cancelled once supply of all the volumes has been received.

v) Blanket Order

Libraries which plan to build up collection on a given geographical area or on a given subject discipline, resort to blanket order method. Under the system publishers or stockists in an area or subject are given blanket order to supply all publications to the library as and when these are published. A

few years back certain American libraries had authorised the Library of Congress, Delhi office, to purchase all books on certain subject because no American stockist was dealing on these subjects.

vi) **Tender System, Quotation Method and Dealer Library Plan**

These are also some times mentioned as procurement methods. Under Tender System a list of selected books is prepared and tender for offering the books at the maximum discount is floated. The firm offering maximum discount on the printed price is asked to supply books. Obviously this is a cumbersome, rather impractical method. The library has to take all steps through which order copy passes each time a list is ready for acquisition. Similarly, dealer library plan under which publishers will send books on approval for selection can be practical only in case of publishers operating in the same city. No foreign or major local publisher would agree to this method. As far as quotation method is concerned, it has been discussed under terms and conditions of supply.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with answers given at the end of this Unit.

9) List all the methods of acquisition through monetary payment.

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5.4.2 Acquisition through Payment in Kind

i) **Institutional Membership Method**

Acquisition through institutional membership is normally done by research and special libraries. The parent body of the library or one of its members becomes member of an institution or organisation working in the same or an allied area. By virtue of the membership it is entitled to receive their publications which on receipt are transferred to the library. Sometimes the library itself takes up membership of an association or institution and becomes entitled to receive its publications. But a membership is normally on payment of annual membership fee and the acquisition of publications cannot be included under free publications. Membership is sometimes the only way of obtaining periodicals or other publications of a society.

ii) **Exchange Arrangement Method**

The method is well suited to the needs of the libraries belonging to organisations which also have publications documenting their own work. Sometimes such arrangements are on cost to cost basis. Both the bodies keep an eye on the total value of the books dispatched and received. Most often such arrangements are for periodical publications only. Duplicate materials and materials not required are also used for exchange purposes.

There are countries who have established "foreign exchange centers" for offering the services in more rational manner. This method often proves very helpful in getting publications which were lacking in a library and were not available through booksellers. Exchange of publications arrangement is very often established between national libraries of two countries.

5.4.3 Acquisition through Gift, Donation and Deposit

i) **Gift**

Gift of books to libraries has been a very valuable but insignificant source of acquisition. Often scholars send their own books to libraries so that it may become accessible to wider reading public. Some may leave a will to their heirs to gift their book collection to local library or to library specialising in the field in which they had their interest in life. Occasionally, Embassies gift books of authors of their country to major libraries of the host country. Major and minor but famous libraries are regular recipient of books, manuscripts and other valuable documents, as gift from heirs of eminent scholars.

ii) **Deposits**

Deposit, another way of free receipt is also a source of acquisition in libraries. Sometimes collection of papers of historical importance in the possession of a person, files of activities of political party or pressure group, etc. is deposited in libraries for safe custody and for use by research scholars. The library of the Indian Council of World Affairs was made depository library for Jaya Prakash Narayan's personal papers. National and State governments regularly send to libraries official publications for use by library members. International Organisations like UNESCO, UN, The World Bank, etc. select libraries in different countries to deposit some or all of their documents for use by research scholar's .The World Bank has chosen universities of Kerala, Punjab, Bombay, etc. as libraries for depositing its documents and books. Deposits are also obtained through soliciting by the organisations or by influential individuals associated with the parent body of the library. With efforts of Dr. V.K.R.V.Rao, one time Director of The Delhi School of Economics, the Rattan Tata Library of the School became depository library for publications of U.N as well as of F.A.O and IBRD. Similar was the case of the Library of the ICWA, popularly known as Sapru House Library. In terms of usefulness such materials far exceed books obtained with great efforts and on high payment publications. National level libraries become depository library for the national government. The National Library of India is depository library for Government of India publications.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

10) Explain Depository method of acquisition with some examples of deposits.

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iii) **Donation of Books**

Donation is another way of making gift in bulk. In some Western countries groups like Friends of Library persuade people to donate books to libraries. This movement was very active during the period when libraries were starved of funds.

Free receipt of books brings with it various problems. If the quantity is large it creates space problems. If the material received is of no value the library finds itself in a fix about treatment to the gifted material. Weeding out may raise public relation problem. Some people want their gifted collection to be kept as a separate collection. But such treatment is possible only in exceptional case of a collection from an outstanding scholar. The library therefore must formulate a policy regarding receipt and retention of gift books.

5.4.4 Free Access to Electronic Sources

The initial high cost of electronic periodicals led to two developments: i) formation of consortia, and ii) movement for Open Access of periodical research articles and research reports. This leads to the second development was given by Open Society Institute which convened an International Conference at Budapest in 2001.The goal of the Budapest Open Access Initiative was free availability on the public internet of peer reviewed journal articles as well as non-reviewed pre-prints of potential interest to the scholarly community. It permits users to read, down load, copy, distribute, print, search or link to the full text of these articles without financial legal or technical barriers other than those inseparable from gaining access to the internet itself. The only copy right restriction is that the authors have control over the integrity of their work and the right for proper acknowledgement. The Initiative has now become a world movement and scholars are archiving their articles and reports for free access. Under the Berlin Declaration, 2003, scholars in Germany are required to archive their work at Max Planck Society. PubMed Central is the archive of the US National Institute of Health where all research results are archived for free access.

Open Doar Directory of open access repositories is helpful in locating several open access sources. Another source for identifying freely accessible electronic journals is CIC Electronic Journal Collection US.

5.5   ACCESSION ROUTINES

Accession or entering into a recording document, bibliographic details of an acquired document is the final routine in the process of acquisition. Traditionally the information about documents acquired by a library is maintained in a register. Since the information is going to be preserved for a long period care is taken to select a register with strong paper and strong binding.

Since most of the information entered in the accession document is the same as are available in book selection card/slip. Prof. Ranganathan suggested using the same slip as accession record. Thus we can also maintain accession record in card form. These cards are preserved in serial number order under lock and key for safety purpose.

In addition to books libraries now also maintain various non-book materials such as audio-visuals and electronic publications .Offline electronic publications, if they are in digital form of printed materials have the bibliographic details as were available in printed version. But online material with no corresponding printed source poses a different problem. Technically these are not owned by a library, the library has got only access right, and therefore the question of their accessioning does not arise. However methods are available to verify if access has been granted.

5.5.1 Accession Policy

Accession record being the inventory of resources owned and available in a library, every document acquired by a library must be entered in accession record. But this is not always the case. Documents acquired on payment must be accessioned, as proof of receipt, to facilitate payment of the corresponding bills. The decision about accessioning documents received in exchange, under membership and as gift, donation or deposit, depends upon library policy regarding their accession. Therefore each library has to have a policy regarding accessioning of materials received by it. The followings are some other points that are covered by an accession policy:

- Decision whether to maintain one sequence of accession number for documents acquired under all categories or adopt different sequence for different categories. Some libraries keep separate sequence for material received as gift,

- Decision on the value of the documents to be entered. Should it be the price printed on the document or, the price charged by the supplier? The price entered should be the actual amount paid for the document. Another point in value is the currency in which price is to be entered. In case of foreign publication the prices are given in the currency of the country,

- Decision about the price to be entered for books received as gift with no price printed in the book,

- Decision about the style and order in which author's names are to be written in the recording document,

- Decision about accessioning book released in parts. If pagination is in continuation, the first installment may be entered with note in remark column,

- Decision about accession record for non-book materials such as microforms, magnetic tapes, etc., and

- Decision about the currency for entering price of materials acquired from foreign country.

5.5.2 Administrative Functions of Accession Record

Accession record is helpful to the library in various administrative functions:

- It shows chronological growth of the collection, total quantity of collection, addition to the collection in any individual year, etc.

- It also gives information about the total number of material received as gift or under exchange, and deposit.

- It also provides information about the number of books weeded out from the collection.

- It is the only source for compiling some statistics for the building planning, for staff requirements, etc.

- It also serves as tool for stock verification.

5.5.3 Procedure for Accession of Document

Price Paid Publications

Once books and bills are received from order unit, bills are arranged by date and each bill and its books are separated. The books are entered in accession register in the order in which they are listed in a bill. Once all books of a bill have been entered the corresponding number of each book is put on the verso of the title page and on the secret page of the books determined by the library. The accession number of the first book and after a dash of the last book is put on the bill. Bills are stamped with a certificate certifying that all books have been duly accessioned in the accession register at the accession numbers recorded on each bill. Books are transferred to Technical Section for processing and bills are passed on to account section for payment.

Documents received as gift, in exchange, as deposit, etc. if decided for accessioning, are arranged by author in alphabetical order and accessioned accordingly. An estimated price is entered in the price column for material not showing any price on the title page.

Speciment page of a Accession Register
(Name of the Library)
Accession Register

Date	Acc. Number	Author	Title	Publisher & Place	Vol.	Edn.	Yr.	Pp.	Source/ Bill No. & Date	Order No. & Date	Cost	Remarks

Self Check Exercise

Note: i)   Write your answer in the space given below.

      ii)   Check your answer with the answers given at the end of this Unit.

11) Explain the administrative functions of accession.

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5.6   ACQUISITION OF SERIALS

Serials or periodicals are the most popular form of reading material in all types of libraries. Any publication which is published with the same title at a fixed interval may be called a serial/periodical. A distinction is made however between a serial and a magazine, the latter being more a publication for popular reading than a serial which is associated with materials of serious nature.

There has been an element of confusion about the terms serial and periodical. According to Anglo-American Cataloging Rules (1988) a serial is a publication in any medium issued in successive parts bearing number or chronological designation and intended to be continued indefinitely. Serials include periodicals, newspapers, annuals, (reports, yearbooks, etc.) the journals, memoirs, proceedings, transaction, etc. of societies' and numbered monographic series. The ALA Glossary of Library and Information Science excludes news papers from periodicals but includes annals. Ranganathans' definition excludes serials from periodicals. In fact, his definition of periodical includes only such regular publications which form part of a volume: A publication which is a volume in itself and is published once in a year is an annual and annuals are called serials by Ranganathan. But the controversy seems to have been resolved by ISO standard 3297. The Standard definition of serial encompasses periodical among serials. The British librarians have also come around to adopt serial as the term for periodicals and journals.

A close study of the routines about ascertaining demand, method of selection and procurement shows that there are very minor differences between books and serials. Generally selection of core serials for libraries are done one time, but on the same criteria as are applied to selection for books, leaving subsequent changes of addition and deletion of titles at the time of renewal for the next year. What is distinct about periodicals is their management. The characteristics that make periodicals distinct from monographs may be summarised as below:

i)   **Publication**

- Periodicals are published by a few specialist publishers only.

- A good number are published by/or are published on behalf of learned bodies only.

ii) **Level of Information**

- Mostly carry articles of primary nature.

- Contain news about scholarly world.

- Provide most recent information expeditiously.

- Serve as major source for book selection.

iii) **Management**

- Core journal list is selected one time in the life of a library. Addition and deletion are done at the time of annual renewal only.

- Subscription is normally entered through agents and the payment is made in advance.

- A sizeable number is acquired under exchange or is received as gratis.

- Periodicals are received in parts and need binding once the volume is complete.

- Require local or commercial documentation and/or SDI service.

- Need extra vigilance to protect against theft and pilferage. Incomplete volumes are often difficult to complete.

Periodicals, during their life time, undergo various changes in name, periodicity, and number of issues per volume, splitting into two or more series, merging with some other periodicals. These changes pose problems in cataloguing which have been discussed by Prof. Ranganathan in greater detail in his book Classified Catalogue Code. These were some reasons which made them to be acquired by a separate section than the acquisition section.

iv) **Electronic journals**

Electronic Journals have given rise to many new supply systems viz.

1) Acquisition through Consortium

2) Acquisition through Aggregators

3) Acquisition of articles through Document Delivery System (DDS)

4) Acquisition of content only through Table of Content Service

5) Acquisition through Free periodical Services.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at this end of the Unit.

12) List characteristics that make periodicals distinct from a monograph.

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1) **Acquisition through Consortium**

   Consortium method of serials acquisition offers added advantage. It provides every consortium member library total access to consortium resources irrespective of e-journals it has subscribed. This feature increases libraries reach to more and more journals without any additional cost. Some important consortia in India are the INDEST and CSIR E-Journal Consortium.

2) **Acquisition through Aggregators**

   Aggregators develop package of databases by entering into an agreement with a number of producer/publishers to offer e-sources in a cluster. They often add value to the package by providing a consistent search engine for searching titles in the group. OCLC, Lexis-Nexis, EBSCO,etc. are some well known aggregators. The problem with aggregators is that they add and drop journals in the cluster unannounced.

3) **Acquisition of articles through Document Delivery Service**

   DDS has emerged to meet the needs of a library for articles from journals not subscribed by the library. The article copy is supplied at a fee which includes cost of the material plus copyright fee. The service is well suited to research institution which don't subscribe to too many journals. Dialog Information Service, EBSCO, OCLC Article First are some firms offering DDS.

4) **Acquisition of content only through Table of Content Service**

   It is a modified form of SDI and is available both through firms offering DDS as well as through subscription agents. It is more helpful for heavy users of DDS service. Uncover Revael, Faxon Flash, Swet Scan are some firms offering TCS.

5) **Acquisition through Free periodical Services**

   Free periodicals are of two types, free with subscription to print issue, and free to every one for asking. However these are mostly published by learned bodies. For further details see "Acquisition through Gift, Donation and Deposit" discussed in section 5.4.3 of this unit.

Selection Criteria for Electronic data

Different institutions/authorities have given different criteria for selection of electronic data bases. The following however appear to be the most comprehensive criterion:

- Integrity of the data,
- Economies of scale,
- Benefits to the greatest number of users,
- Timely availability,
- Extensive contents,
- Increased functionality,
- Enhanced access to remote users,
- Improved resource sharing,
- Ease of archiving and replacing.

Edward Evans considers content access, support after delivery and cost as the most important criterion while evaluating an electronic resource.

Problems with electronic sources

- Data can be devolved from the delivery mechanism. This creates problem in choice of suppliers as all are supplying the same data. For example BIOSIS is the main supplier of information in life sciences offering 14 million citation records from sources such as Biological Abstract, Zoological Records. But this data is also available from Dialog, Elsevier Science.

- Quality of the data is difficult to assess before acquisition. No source like Journal Citation Report is available for e-sources.

- Electronic sources often exclude certain auxiliary information such as letters to editor, news about conferences, etc.

- Stability of text over a period of time is often doubtful.

- More than one price models are mind boggling.

- Many firms link electronic subscription with print subscription e.g. Academic Press.

- Electronic databases are accessed under an agreement which spells the following points:

    – Number and categories of users;

    – Time period of access;

    – Place /places from where access is available;

    – Archiving facilities for subscribed period once subscription is cancelled;

    – Extent of documentation regarding hardware /software;

    – In case of CD provision for updating information and clarification on copyright.

5.7   SUMMARY

Acquisition of resources is akin to transfusion of life blood in the library body. The routines of acquisition include selection, approval of the selected items, preparing indent, placing order and accessioning of received materials. Libraries acquire material through purchase as well as through exchange. They also get materials as gift. Electronic publications have now become an integral part of collection. In acquisition work libraries have to take decision about supplier and about terms and conditions of supply. As major academic periodicals are available in electronic form and their acquisition is now mostly done through a consortium. Accession record is of much administrative importance.

5.8   ANSWERS TO SELF CHECK EXERCISES

1) Routines of acquisition require input from persons outside the acquisition section, even from other departments outside the library such as people with knowledge of law and technology. E-serial acquisition calls for selection of favourable price model, decision on terms and condition of access, information on archiving facilities. The list of suppliers now also includes Aggregators and Consortium.

2) The main objectives of the acquisition section of the library are:

- To acquire material as quickly as possible,

- To maintain high level of accuracy at all levels of procedure,

- To keep the work process simple to achieve lowest possible unit cost,

- To develop close working relationships with other library units and with vendors.

3) The following points needs to be considered while preparing budget estimate for Acquisition section:

A) In overall amount required for the year,

- Provision for inflation rate,

- Provision for new courses, new extension services, etc.,

- Provision for likely revision in subscription rates,

- Provision for likely change over from print to e-serials.

B) Department wise allocation,

- Utilisation of previous years grant,

- Nature of course with regard to the ratio of periodicals to monograph requirements,

- Proposal for new project.

4) The ordering process involves following points:

Pre-Order work: Checking of bibliographical details; checking of duplication with order record, with receipt record, with catalogue, with suggestion letter if a duplicate copy is required.

Order work: Checking order letter with requisite details of an order copy regarding terms and conditions; clarification about requirements in invoice.

Order receipt work:

A) Checking if received consignment for, a) complete supply of ordered items, b) condition of items supplied, accuracy of items supplied; c) checking of invoice for correct details;

B) Taking prompt action for corrective measures for any mistake in supply or discrepancy in invoice, etc.

5) The advantages of acquisition through agents are:

i) Saving staff time, on cartage, on postage, etc.,

ii) As bulk customer they get prompt response from publishers for any problem which they pass on to the library,

iii) Provide efficient service in case of rush order,

iv) Get for library better terms on license for e-resources,

v) Provide advance information on likely revision in subscription rates which helps library in adjusting its budget,

vi) Over time they build up various types of information on databases and various pricing models which helps library in selection of e-sources,

vii) Agents are now attending library conferences which have given them better understanding of library needs.

6) The benefits and problems of acquisition through consortium are:

- Libraries have to accept journal of marginal interest,

- Libraries have often to forgo acquisition of periodicals of their local interest,

- A fair amount of budget is committed over which they have no control,

- Libraries get better terms for access right for e-sources,

- Their readers get access to journals which otherwise they could not have subscribed.

7) The problems specific to Indian book market are:

Book markets concentrated in metropolitan cities only,

No standard trade discount system,

Delay in getting new publications,

Problem of getting foreign language, non English language, books.

Local publication acquisition problems: No commercially published selection tool; considerable delay in publication of INB, not many good firms dealing in old and out of print books, government publications are not sold on commercial pattern. Often procedural hurdles are placed in the way of importing foreign publication.

8) Trade discount, foreign currency exchange rate ,supply of latest edition, readiness to replace defective copy, correct price to be charged, written agreement where advance payment is involved, clear statement on terms of access to e-sources are point to be covered in terms and conditions of supply.

9) The methods of acquisition through monetary payment are:

Standing Order Method, Books on Approval Method, Regular Order/ Open Purchase Method, Sanding Order Method, Blanket Order Method, Tender, Quotation, and Dealer Library Method.

10) Deposit is a category under free acquisition method; It may be a onetime deposit as when personal collection of some eminent person is deposited or regular arrangement, as some libraries get official publications of government or institution. Jaya Prakash Narayan papers at Sapru House library, World Bank Publications at some university libraries.

11) The administrative functions of accession are:

- Source of information: (i) Total collection (ii) Total of annual addition,

- Record of annual receipt under various methods,

- Record of books weeded out,

- Tool for stock verification,

- Source of compiling various statistics.

12) The following characteristics make periodicals distinct from a monograph:

- Published by specialist publishers or by scholarly bodies,

- Carry along with articles also news, book reviews, editorial notes, letters addressed to the editors,

- Subscription on annual basis and mostly through agents only,

- Need indexing services for efficient use,

- E-journals are also available through Aggregating firms, through consortium and also free,

- E-journals are also available as cluster of articles; even content pages are also available through commercial firms.

5.9   KEYWORDS

Accounting	:	Keeping record of expenditure from sanctioned amount.
Aggregators	:	Suppliers of online articles data from different journals in collected form.
Bibliographic Detail	:	Author/editor, title, date, place of publication, publisher, pages, note (if any).
Berlin Declaration	:	Declaration made in Berlin asking research scholars to deposit research results at The Max Planck library for free access to scholars.
Consortium	:	Group of libraries formed to acquire online periodicals.
Credibility	:	Goodwill of a firm as an upright supplier.
Document Delivery Service	:	Supplying documents on demand of the users.
Open Access	:	Facility to free access to online resources.
Reviewing Media	:	Sources providing reviews of new publications.

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UNIT 6   BASIC HOUSE KEEPING OPERATIONS PART 2

Structure

6.0   OBJECTIVES

After reading this Unit, you will be able to:

• explain the need for processing of documents collected by library;

• discuss the areas of physical and technical processing;

• describe the procedures to be followed in classification and cataloguing of documents;

• explain the meaning and scope of circulation work;

• discuss the methods and processes of charging and discharging; and

• describe the serials control process in libraries.

6.1   INTRODUCTION

This Unit deals with three important aspects of libraries i.e., processing, circulation and serials control. Libraries acquire materials in different categories for the use of library members. These materials need an arrangement for easy access. The materials also need preservation and protection from manmade and natural causes of deterioration. The materials are therefore first organised into various sequences, some of which are openly accessible while others are accessed under supervision. Materials in each sequence are further arranged in classified order in their respective shelves.

But before the materials are arranged as above, these have to be prepared for issue or consultation in the library. Preparation requires stamping of books with library stamp to give them a symbol of library ownership. Further these are provided with certain special stationary to facilitate their circulation.

Circulation is a library service of foremost importance. It is the quality and method of circulation service that makes or mars the image of a library among its users. Circulation is providing to the registered members of the library, facility of borrowing materials from library for reading outside the library premises. It is open to persons who take membership of the library. In a public library any citizen of the district can become member of a library. In academic library only students, the faculty members and staff have this privilege. To serve their members, libraries often borrow materials from other libraries. Libraries have various control methods to regulate the circulation function.

Serials absorb a major portion of the library budget. Once subscribed, a title becomes annual commitment until such time as decision is taken for cancelling its order. Receipt of serials is a job of much alertness. Any delay in reminding the supplier for replacement may result into loss of the issue until it is purchased from a bookseller selling second hand books. There has been a tradition of organising receipt and maintenance of serials by a separate section. A select number of serials are put up for display on specially designed display racks. Usually the loose issues of the titles on display are kept along with the current issues till the volume is complete. Serials' binding requires carrying out certain preliminary steps before sending them for binding.

6.2 PROCESSING WORK

Processing work consists of Physical processing and Technical processing. Both activities are carried out in one department of the library popularly called Technical Department although also known by Cataloguing Department or Technical Processing Department.

6.2.1 Need for Processing

- making library material ready for use.
- ensuring identification of library material that it is property of library.
- facilitating use of library material.

6.2.2 Organisational Structure of Processing Work

The processing work is organised in three units, namely classification unit, cataloguing unit and physical processing unit. But the work of all the three units is closely interlinked. The cataloguing unit has to depend on classification unit for subject index and cross reference added entries. The classification unit has to depend on the correct filing of catalogue cards for checking duplication in constructing class number. The chief of the department has to coordinate the jobs of the two technical units.

6.2.3 Personnel for Processing Work

An essential requirement in personnel of the processing department is an eye for the details. Even the most mechanical job of copying call number from verso of

the title page to the catalogue cards, requires alertness of high degree as slight slip, like putting 372 in place of 327, may send document in political science to the subject area education. The jobs of the department provide the base for library service. The two technical functions of classification and cataloguing require understanding of the world of knowledge, broad acquaintance with all the disciplines, and a clear vision about the needs of the local clienteles of the library. The entire routine is a continuation of the existing system and services of the library. The practice of deviation in classification and cataloguing should be in keeping with the fundamental spirit of the classification scheme and cataloguing code and should be followed with consistency in keeping with the authority file maintained in the section. The staff has to be a team of competent personnel in the processing department.

6.2.4 Physical Processing

Physical processing, also called preparation of books for use by the user community, is carried out at two stages. At the first stage, which begins soon after the book is received from acquisition, the book is first stamped at various places with library stamp, as a sign of library ownership. Next, certain essential stationary items are pasted on the book at the designated places. These include library label, date slip, tags, book pocket. At the second stage, after classification and cataloguing, the call number, developed for the book, is written on the verso of the title page in pencil and on the tags and date labels in ink. It is also noted on all the catalogue cards. A book card is prepared for each book which has author title accession number. Call number is written in ink. The catalogue cards are separated in two groups, one by class number and the other by alphabet. Each group is further arranged in a systematic order and cards are filed in their respective trays.

Once the processing work is completed a list of newly added books, called list of addition is prepared and books are released and sent to the maintenance section. Thus, it requires carrying out the following jobs in physical processing:

- Dust cover strengthening

- Stamping with library name stamp

- Pasting various labels, tags, book pockets, bar code, etc.

- Putting call number at various places in the book and in catalogue cards

- Filing of catalogue cards

- Writing call number, author and title on the Book Card.

- Preparing list of addition at fixed interval for display and for circulation among faculty members

- Releasing books processed during the week or month for addition to the collection.

Note: Automation of circulation routines has dispensed with need for book pocket and book card.

i) **Dust cover strengthening**

Publisher in order to enhance the physical get up of books put dustcover around the book. Very often dustcovers carry information which is not

available in the text of the book. To protect the aesthetics of the books these covers are protected by putting around them cellophane covers.

ii) Stamping

Books received for processing are first stamped with library stamp to display the ownership status of the book. These stamps are pat designated places in each book such as the verso of the title page, across the two sides of the closed book, library secret page and at the last page of the book.

iii) Pasting

To further strengthen the ownership position, each book has a **library label** or **book plate** which is pasted at upper left corner inside the first book cover. **Tags** for writing call number are pasted on the spine of the book at a place 1" above from the bottom of the book. If the book has dustcover an additional tag is pasted on it at the same place. In books with thin spine, tag is placed at left side of front cover at the same height. Providing protective tape to the tag has now become a common practice. It ensures it from loss and defacement. In libraries where book cards are in use, a **book pocket** is pasted on inside the front cover at left hand bottom corner. Care should be taken to keep the open side of the book pocket on the right side direction of the cover. **Date slip** is pasted inside the book on a page facing the first cover. Some libraries use the last page of the book inside the cover.

iv) Call Number

Call number of the book is written, in ink, on outer and inner tags, on date slip, and in pencil, on the verso of the title page near the accession number, on the secret page, and at the last page of the book. Call number is also written in pencil on all the various catalogue cards prepared for the book.

v) Filling of Catalogue Cards

The catalogue cards prepared for each book are first separated into groups of alphabetical and classified cards and arranged in each group in serial order. Both are arranged as per their requirements and filed in their respective trays.

Information about accession number and call number on secret page is helpful in ascertaining information about authorship, etc., when books badly damaged, have no title page and are to be sent for binding.

Self Check Exercise

Note: i)   Write your answers in the pace given below.

ii)   Check your answers with the answers given at the end of this Unit.

1)   Explain physical processing.

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2) Describe routines of physical processing.

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6.2.5 Technical Processing

Technical processing consists of jobs in relation to classification and cataloguing of books. Libraries core functions, carried out behind the screen, relate to three broad areas viz:

i) Acquisition of resources,

ii) Organisation of resources along with development of tools for their access,

iii) Maintaining resources in good condition for use by contemporary generation and also for use by the coming generations.

From the point of view of providing access to the resources, organisation work is of prime importance. It helps readers in getting access to the needed document with minimum efforts and saves time of the reader for its maximum utilisation. Organisation is brought about by providing each document a unique number through a symbol called call number and by developing access tools, i.e. catalogue cards to satisfy all the various possible approaches, expected of a person looking for materials in a library. The jobs carried out for this purpose are called Technical Processing jobs.

Technical processing includes:

• Classification of books

• Cataloguing of books

A) **Classification of Books**

Classification work is carried out to bring organisation in the library materials. It is achieved by assigning a code number, called call number, composed of class number and book number, to each document based on a scheme of classification. A scheme of classification is an attempt to map the universe of knowledge, and assign each individual subject an artificial number which replaces the name of the subject. Since the universe of knowledge is ever changing the schemes developed either need constant revision or must have built-in mechanism to adapt to the situation.

The system of organisation is achieved by using a logically developed scheme of classification. At various stages in the history of librarianship schemes of classification have been designed. But among the existing schemes, DDC and UDC are the classification schemes which have wider acceptance. The selection of scheme does not come in the purview of processing department. The department is expected to use the scheme selected by the library for classifying the resources.

Classification is an essential function of a library. In the present age of tremendous growth in the world of knowledge and information unless resources are organised in some rational order access to the needed document is just not possible. The work of classification is carried out through the following distinct jobs:

- Checking duplication

- Deciding the basic class

- Detailed class number

- Working out book number

- Working out subject headings

- Checking class number by the chief classifier

The basic class is normally identified by looking at the title, preface to the book, introduction by the author and by going through the content pages. Occasionally help of subject expert is also sought. The classification unit also maintains an authority file for recording local deviation in construction of class number.

Need for Classification

- All libraries (academic, public and special libraries), irrespective of large or small collection of library resources, have to introduce some sort of organisation of their collection. Unless they organise the collection according to an established system of classification it cannot be used efficiently. A rational/logical system of organisation is a *sine qua non* for providing efficient, accurate and expeditious access to the desired material**.**

- Library materials are constantly in use, both for borrowing and for browsing in the stacks. In the process the order of organisation gets disturbed. Classification of materials is essential to bring the order back for use by new readers and also to re-shelve books which have been returned or left after being browsed by a reader.

- Acquisition of new materials is an ongoing activity in libraries. The new acquisitions have to be accommodated in their proper place in shelves. Proper placing is only possible if they are classified according to an approved scheme of classification and bear call number.

- Staff in libraries like any organisation keeps changing. Unless the library follows a scheme of classification the authority manual developed to meet the specific situation in classification shall become meaningless.

- Books returned from binder or binding unit after binding are replaced in their respective shelves with the help of call number based on the adapted scheme of classification.

Tools for Classification

The following tools are to be made available in the technical section for classification of library materials:

- Copy of the scheme of classification selected by the library,

- Copy of Authors table (approved for use) if the scheme is other than Colon Classification,

- Copies of recent issues of the Indian National Bibliography, British National Bibliography and American Book Publishing Record (ABPR),

- Library of Congress Catalogue of Printed Books,

- Sear's List of Subject Headings,

- L C List of Subject Headings,

- Dictionaries, world atlas, single volume encyclopaedia.

The materials acquired by libraries are generally recent publications which are likely to be already listed in current national bibliographies. The bibliographies, both, INB and BNB, also give class number for books listed which have been worked out by a team of experts. The same number may be copied by the unit. However, in the recent past, *WorldCat* and other online sources on the Internet more easily provide classification number, subject headings and other metadata of books.

Libraries also buy many old publications which are already available in the Library of Congress catalogue with class number and can be adapted by the library. Subject Heading lists are used to provide for subject headings which shall be used by the cataloguer for making added entries. However these list are not required if the library is following Colon Classification for classifying books as this scheme uses chain procedure for deriving subject headings.

Personnel for Classification

The first step in classification is to identify the basic class of a book. Although great number of books acquired by libraries have simple titles which disclose the basic subject of books easily, there are also many a titles which defy such easy solution. It requires clear understanding of the universe of knowledge which comes by keeping oneself abreast with various disciplines through general reading as also possession of in depth knowledge of one or two disciplines. The classification unit therefore must have staff with in depth knowledge of various disciplines. It has been said that the classifier must have an aptitude for classification. In certain situations even help of subject specialist from the faculty may become essential.

Classification Procedure

The job of processing is carried out according to a set routine for the same. The routines include:

- Checking with the existing collection,

- Determining specific subject.

- Assigning Class number,

- Assigning book number,

- Recording needed subject headings for the cataloguer,

- Review of call number by chief classifier.

Before beginning to assign class number you must know the policy about the extent of depth of classification in the library. Some libraries such as public library follow broad class number policy, while others such as university or research libraries, follow depth or close classification.

Checking of Books

The books are arranged alphabetically by authors' name and are taken to the author catalogue for checking. The purpose of checking is to find out if the library already has copies of some of the books in its collection. If copies with the same edition are already available, the words "add" are written on fly leaf of each of the identified book. The call numbers for these books are copied from the catalogue card and written on the verso of the title pages of the books being checked. The words Main and Shelf are written on fly leaf if library has earlier editions of these books.

Determination of Specific Subject

The next step is determination of specific subject for books not found in the catalogue during the checking. Specific subject is determined with the help of internal evidence in the books such as title, subtitle, preface, author's introduction, observations of some eminent authorities often printed on the back of the jacket or on jackets' fly leaf. If internal evidences fail one looks up external evidences such as reviews in subject magazines, checking with national bibliographies like INB, BNB and as last resort consultation with subject experts. In many a cases the title or subtitle itself is enough to decide about the subject.

Assigning Class Number

When it comes to assigning class number, one has to remember the policy of the library about assigning "close" number or "broad" number. In special, research and academic libraries, policy of close number is followed. But public libraries remain content with broad classification. Class number is constructed with the help of schedules of the subject in the classification scheme. In Colon Classification one has to follow the facet formula of the subject schedule to construct class number. In enumerative schemes like the DDC or UDC, where subject schedules or relative index fail, one has to take help of lists of subject headings, like the Sear's List or the LC List of Subject heading. Final class numbers are written, in pencil, on the verso of the title pages of each book.

The LC Cataloguing- in–print policy has now solved, to a great extent, the problem of class number construction for books published from the English speaking countries. Even subject headings for added entries are also available in the books.

Book Number

Assigning of book number, in case of enumerative classification schemes is achieved with the help of one of the various Authors Tables developed for the purpose. In practice libraries are generally using the first three letters of the title of the books or of the names of authors.

Staff Manual or Authority file

Authority file is an important document maintained by the Technical Section to record deviations adapted in the library in deciding basic subject or class number. The deviation from the otherwise required decision, is made to suit the local needs of a library. The file serves as guide to the new member of staff or to a newly transferred staff.

Self Check Exercise

Note: i)   Write your answers in the space given below.

      ii)   Check your answers with the answers given at the end of this Unit.

3)   Write in brief the need for processing work.

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4)   Write in brief the need for classification of documents.

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5)   Explain the routines of classification.

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B) **Cataloguing of Books**

Cataloguing is the next technical job done by the technical unit. Cataloguing is done with the help of code for cataloguing. The AACR-2R is the one code which has worldwide acceptance It is a dictionary code according to which the main entry begins with the author's name. The Classified Catalogue Code of Dr. S. R. Ranganathan is used in many libraries in India. In CCC the main entry begins with class number. The CCC uses chain procedure to derive class index entries, but in AACR one has to use one or other list of subject headings. LC List and the Sears list are used for this purpose.

In cataloguing a book the following jobs are carried out:

•   Preparation of the main entry

•   Preparation of shelf list

•   Preparation of added and reference entries

The essential bibliographical details for monographic document, for serials and for non-book materials that make a document distinct were approved in 1971 and adopted in1974.The bibliographical details fall under the following areas:

1) The title and statement of authorship area,

2) The edition area,

3) Imprint area,

4) Collation area,

5) Series area,

6) Notes area,

7) International Standard Book Number, Binding and price area.

Need for Cataloguing

*   Catalogue helps choosing a specific title among the books on a subject, through bibliographic information about book, in the catalogue card.

*   The multiple entries for a book help user in locating in the catalogue desired book about whose author s/he was not sure but knew other bibliographical detail.

*   The classified part or subject catalogue in dictionary catalogue, gives an idea of amount of material in a library on a given subject and its subdivisions.

*   The date of publication in the catalogue helps reader know that how up-to-date is the material in a book.

Note: Much of the problem of cataloguing foreign language books is solved due the cataloguing-in-publication policy being followed by publishers in foreign countries. But libraries should not copy the class number blindly and must check with the contents of the book for possible misinterpretation of the subject.

Tools

*   Catalogue Code

*   List of subject headings(if AACR is in use)

*   Dictionary of Indian names

*   Language dictionaries

Cataloguing Process

The jobs of the cataloguing depend upon the code of cataloguing adopted for cataloguing work and the scheme of classification selected for classification. The placing and extent of details provided in added entries vary in the two codes. If the library is following the unit card policy, the job of preparing added entries is reduced. If the classified cataloguing code is in use the back of the main card shall need provision for tracing.

*   Preparation of the Main entry

*   Preparation of shelf card

*   Preparation of Added and Cross Reference entries

*   Checking of the main card and added entries

Self Check Exercise

Note: i) Write your answers in the space given below.

ii) Check your answers with the answers given at the end of this Unit.

6) Describe the areas of Bibliographical details of a book.

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7) Discuss the need for cataloguing.

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6.3 CIRCULATION

Circulation of documents or circulation service and reference service are the two services which are considered to be the public face of a library. The efficiency and the manner of their performance determine the prestige and rating of any library in the eyes of its user community. Circulation service refers to facility provided by a library to its members to have one or more documents for study outside the library premises for a specific period. Such a facility is extended against guarantee in the form of a membership card given to members once they take up membership on fulfilling the requirements for the same or get membership by virtue of their position in an institution or organisation, the parent body of library.

The basic aim of the circulation section is to maximise the utilisation of the library resources and the major concern of circulation service is to perform this task with economy and efficiency.

In this Unit, you will learn the scope of work of the circulation section, circulation systems, and policy regarding borrowing privileges and the records and statistics maintained by the section.

6.3.1 Scope of Circulation Work

Core Functions:

1) Users' registration

2) Charging /Discharging

    i) Reminder and hold up

    ii) Reservation and Recall

    iii) Renewal

    iv) Overdue charge

3) Record keeping/Statistics

Non Core Functions:

1) Wicket gate supervision

2) Property/Belonging counters supervision

3) Stack maintenance (Shelving, dusting, moving of books)

Depending upon the size and nature of library, scope of the circulation section keeps on expanding and contracting in its functions. In a large library the non core functions may be assigned to independent units but in a smaller library these may be under the supervision of the circulation section.

6.3.2 Users/Members Registration

The first step in organising circulation work in a library is to define its clientele. The clientele in the case of a public library is the general public residing in a defined geographical area. In the case of an academic library, it the students and faculty members, including the authorities of the institution, who constitute the clientele. The clientele are to be registered with the library to establish their identity for extending library facility. The identification is necessary for the accomplishment of the controlling processes like holds, recall, overdue charge, etc. Registration is the initial contact point with the potential users of the library. It helps the library to understand the type and level of service that the potential members are going to expect from the library. It also offers library opportunity to explain its members their rights and privileges as well as their responsibility towards preservation of the resources.

Usually a card in the shape of postcard with language of application printed is given to potential user where blank spaces for name address qualifications, etc., are available. Space is also available for introduction by an official or a public man of standing. In case of an academic institution, the administration sends to the library list of admitted students. The students come to the library to collect application form along with their identity card. In both cases on completion of registration, members are given library cards as per their entitlement and a copy of the guide lines for using the library.

6.3.3 Charging and Discharging

Charging/Discharging function is the main component of the circulation work in a library. It refers to the issue and return of books for reading outside the library for a specified period. The charging methods have evolved over a period of time. The service is available to those who have registered themselves with the library as its member. It began with the simple Day book method in which all the books issued in a day were entered in a register in the order in which they were issued. As the books carried no information of date on which they were issued problem of locating the record for cancellation made the library adopt register system in which a page was assigned to each member. This system created problem of locating a particular book out on loan, as the record of issue was by

name of the borrowers only. To get over the situation a slip was made for each book issued. These slips were arranged by author of the book and kept at the counter. The present book card is a replacement of the slips. The book card has information about author, title, call number and accession number.

Although there are various improvised systems for charging and discharging of documents, the two most widely practiced systems based on combination of book card and membership card are the Browne circulation system and the Newark circulation system.

Normally books acquired by libraries are transferred to the stack area after they have been made up with necessary stationary items such as library label, due date slip, book pocket for book card and book cards complete with information about the book, etc. Issue counters are now designed with built in charging tray and enough space for storing books returned by members and for storage of various records and a set of printed stationary items required for use at the counter.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

8) Describe evolution of book card system.

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Charging Process

Browne System

The system is named after Nina E. Browne librarian of the Library Bureau, Boston who developed the system towards the close of the Nineteenth Century. Under the system each member is given as many pocket type membership cards as the number of documents s/he is entitled to borrow from a library. The card bears name, address and membership number of borrower. The borrower presents book for borrowing along with library card. Counter staff takes out book card from the book and puts it into the pocket of the library card, stamps the due /issue date on the date slip in the book and gives to the borrower. The book card along with borrower's card is filed behind the date guide in the charging tray. When the book is presented for discharging, the staff with the help of due date in the book, takes out from the charging tray the relevant book card along with borrower's library card. The book is put on the trolley for shelving and the borrower gets back library card.

Sample of material used in Browne system

CALL. NO. .... ACC. NO. ....

Name of the Library : ....

The following books were issued/are due on the date stamped below:

Date of issue/Date of return   Date of issue/Date of return

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

Size: 12.7 cms × 7.6 cms
Fig.6.1: Date Slip

Book Pocket---------------------------

Acc.No.--------------------------------

Name of the Library

Size 5"× 3"
Fig.6.2: Book Pocket

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CALL NO. ........................

ACC NO. ........................


Author: ---------------------



Title: -----------------------
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10.25 × 5 cm
Fig.6.3: Book Card

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ID.NO

NAME

ADDRESS


            SIGNATURE OF
            THE BORROWER
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Fig.6.4: Borrower's ticket

Advantages of the System

- The procedure is simple and less time consuming.

- Issue of reminders and calculation of overdue charges on the book is simplified as the staff does not need to check up members detail from membership record.

- Statistical record of issue also can be easily prepared.

- Reservation and/or recall can be carried out promptly.

- Borrower is not required to sign at the time of borrowing.

Disadvantages of the System

- No permanent record of issue is available. (This record can be obtained from the date slip of the book).

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- It is difficult to ascertain the number of books issued to a person.

- In case of loss of library card misuse of the card is possible as borrower's signature is not required.

- Possibility of mismatch of book card and borrower's card if care is not taken in inserting the book card in right borrower's card.

- The system is popular in India because of its simplicity. To overcome some of its limitations many modifications are incorporated by libraries.

Newark Charging System

Newark system also came into use around the same time at the Newark (New Jersey) Public Library. Its positive attributes include accurate files, conveniently located at the circulation desk by the patron's name due date and call number. It can also generate accurate statistical reports and accommodate different loan periods. However it is labour intensive.

The charging routines under this system are the same as are in the Browne system with the modification that in Newark system, book card has a column for recording user's membership number opposite the due date and borrower's card is given back along with the book to the borrower. In the case of discharging a document the date of return are put on the borrower's card while returning the card. In case any fine for late return is due the card is returned only after the fine is paid.

Samples of the Materials used in Newark Charging System

CALL NO.:		ACC. NO.	
Name of the Library			
The Book was issued/due for return on date stamped or marked below			

Size 5"×3"

Fig. 6.5: Date slip

OPEN FLAP
NAME OF THE LIBRARY
BRIEF LIBRARY RULES
1
2
3
4
5

Size 5"×3"

Fig.6.6: Book Pocket

NAME OF THE LIBRARY

CALL NO.

ACC NO.

AUTHOR

TITLE

This Book was issued / is due for return on date stamped or marked below:

Size 4"×2"
Fig.6.7: BookCard

NAME OF THE LIBRARY

Borrower's Id_____

Date of expiry_____

NON-TRANSFERABLE

The following books were issued to me.

Signature

Date of issue	Date of return	Date of issue	Date of return

Fig.6.8: Borrower's Card

(**Note:** These columns are repeated on the back of the card)

Advantages of the System

- A permanent record of type of books circulated and the kind of books borrowed by a member is available.

- The record of number of times the book has been circulated is available at all time from the issue record even when the book is not available in the library.

- It is also claimed that several assistant can carry out work simultaneously, or that borrower can be allowed to borrow books from any branch of the library. But such facilities are also available under the Browne system. The limitation is the number of books a member is entitled to borrow/ already borrowed cannot be checked at the time of issuing a book.

Disadvantages of the System

- The routines are slow and cumbersome as the issue work requires writing membership number on book card and stamping of due date on member's card also.

- There are chances of mistake in transcribing member's number on book card.

- Membership files both serial number wise and alphabetically by name have to be consulted repeatedly.

- Though claim is made that the system is fool proof, it is also said that this advantage may not be always available.

Self Check Exercise

Note: i)   Write your answers in the space given below.

ii)   Check your answers with the answers given at the end of this Unit.

9)   Describe charging routine in Browne system.

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10) Describe difference between book cards in Browne and Newark systems.

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11) Give a comparative account of advantages of the Browne and Newark systems.

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6.3.4 Control Methods for Circulation System

Besides the charging routines the other functions falling under the core area are Reminders, Reservation, Recall, Renewal and Collection of over dues for late return of books. There are standard languages for communicating these, and printed cards for these functions are normally kept at the Circulation Counter for use as per need.

i) **Reservation**

When new collection of books is released for circulation, often more than one reader are interested in borrowing some books. In such situation the first person who expressed desire for a particular book is issued the book and the book is reserved for others to get the book in turn. Each one of the subsequent member is intimated about the availability of the book as and when his turn comes. Sometimes a reader wants a book which is already out on loan. In that case the book is reserved by putting a slip bearing reader's detail in the issue record of the book and the member is intimated about its availability when it is retuned by the earlier reader.

ii) **Recall**

When for one reason or other, the library is in need of a book already out on loan, and still not due for return, the circulation section may ask the borrower to return the book to the library. Such practice is called recall of book by library.

iii) **Renewal**

Members who want to keep book beyond due date may get the due date extended either by presenting the book to the counter or by telephone. Renewal is allowed only if the book is not reserved by some other member.

iv) **Reminder**

Sometimes members forget to return books due for return, or deliberately hold the book as they are afraid that they may not get it again. This happens when books are in heavy demand and in short supply. In such cases the circulation counter sends reminders to the concerned members for early return of the books.

v) **Overdue charges**

In order to deter members from holding the books beyond the due date libraries follow a system of levying fine for the period the book has been held up beyond the due date. Such payments must be received against receipt. There have been cases when audit party has asked the library to produce record of such income. The overdue charges are deposited with the central office of the library.

vi) **Inter-library Loan**

Inter-library loan is the oldest form of library network or cooperation among libraries. When a book is needed by a library member which is not available in the library, the library makes a request to a sister library, where it is available, for loan of the book. Such transaction is done on mutual

understanding and under agreed terms and conditions. Normally books procured under inter-library loan are to be used within the premises of the borrowing library. Such a condition is laid to ensure prompt return if the lending library is in need of the same book.

Self Check Exercise

Note: i)   Write your answers in the space given below.

ii)   Check your answers with the answers given at the end of this Unit.

12) Describe the need for getting books under inter library loan and condition for their use**.**

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13) Discuss, in brief, the various control methods used by the Circulation Section.

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6.3.5   Records and Statistics

Circulation section maintains various types of records and statistics which play an important role in planning library's future programmes and policies. The following are some important records:

• **Membership record**

The membership record helps library learn about the type of library users and how the library should build up its resources to meet their information needs. It also helps in organising library's orientation programme.

• **Circulation statistics**

Circulation statistics is maintained at the counter to serve as guide for increasing the number of copies for books in heavy demand. It also helps in changing the staff strength at the circulation counter.

• **Interlibrary loan record**

Libraries borrow documents from various libraries to meet the needs of its members. It must maintain record of such transactions to ensure its smooth functioning.

- **Suggestion Book**

  Library receives various suggestions from members regarding new books, problems in property counter shelving of books, etc. Such suggestions are studied by authorities for taking appropriate action on the same.

6.4 SERIALS CONTROL

Library collection comprises monographs and serial publications. Both are now available in printed form as well as in electronic form. In this Unit we are concerned with the control problem of serials in printed form. We have already studied acquisition of serials in Unit 5 of this block. In this Unit, we shall study routines of the serials control. Serials control is primarily concerned with decisions about the administrative set up and management of the routine for placing order, receipt and recording of issues, and its preservation for easy access by the users of the library. Traditionally the entire routines of acquisition, service and preservation, etc. of serials have been dealt with as functions of a separate department of a library. The rationale for this is sought from certain peculiarities that are identified in serials. Some of the peculiarities are:

1) Unlike books, selection and acquisition of core list of serials in libraries is a one time job. Later on it is mostly minor addition and deletion to the core list as annual routine at the time of renewal of subscription.

2) Acquisition through agents is generally a preferred method for serials acquisition. Agents have developed specialisation in handling serials and keep themselves up to date with new titles, changes in titles publication schedule and subscription rates and offer various value added services.

3) Serials undergo many changes in their life time in titles, periodicity, sponsoring bodies and in resuming publication with gaps. Often their titles create problem because they are only news letter, transaction, proceeding, etc. and need addition of names of publishing institution/organisations to become meaningful.

4) Serials are published in parts and need much alertness in receipt of each individual issue of a serial. Failure of prompt claim for non receipt may result into permanent loss of the issue to the library.

Despite these peculiarities, which call for more vigilance by the clerical staff, there is little that calls for a separate management unit to deal with their various routines. W.G. Potter has succinctly explained this point by saying that "… serials processing should not have been divorced from other processing functions to begin with… separate procedure and units for the processing of serials are only called for in a few areas(which) are largely clerical and can be supervised by professional staff responsible for broader functions…".

Once the selection of titles has been finalised, the management routines of serials begin with order then passes through receipt, recoding, technical processing, and providing service and culminate in preservation. Thus, acquisition control is said to involve four routines: ordering, recording or check in, claiming issues not received and dealing with invoices. Order routines deal with three types of order: new subscription, renewals and order for back issues.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

14) State the peculiarities of serials that call for separate department for serials management.

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i)   **New Subscription**

The first step in placing order is selection of the supplier. We have discussed the advantages and disadvantages of ordering materials through publishers and agents in Unit 5 of this block. Generally orders for subscription are routed through agents. Libraries in India and perhaps most of the non-western countries, subscribe greater number of serials which are published abroad. The libraries have to incur heavy expenditure on postage more so if the subscription is through air. Before preparing order form it is necessary that bibliographical details of each title have been checked for accuracy and completeness of information. For this purpose titles should be checked with reliable authorities such *Ulrich's International Periodical Directory*, the *Press in India* and *Directory of Indian Periodicals*. One may also consult *Union Catalogue of Scientific Serials* (NISCAIR) and *Union Catalogue of Social Science Periodicals* (NASSDOC).

ii) **Order Form**

The order form should have complete information about the serials along with necessary instructions for dispatch and for preparation of the invoice. It should also have indication if the subscriptions are to be renewed automatically until letter of cancellation is received. The following details are considered to be the complete information about a serial title: Title, ISSN, Publishers names and addresses, starting date and volume. Each item should have individual order number. The order form should also have delivery instruction. The titles in the form should be listed in alphabetical order. The order form should be prepared in triplicate, one for the supplier, one for order file and one to accompany the invoice to be transferred to the finance office for payment. The order details should be recorded on the relevant register page/ registration card prepared for recording receipt of the serial's issues. This will facilitate correspondence without looking up the files.

iii) **Renewals and Cancellations**

Suppliers send their check list of titles subscribed or invoice for renewal of subscription much in advance at the last years' rates. They raise supplementary bills for any revision in the rates. In case the library is intending to cancel subscription to any title it must inform the supplier in

proper time before invoices are prepared. In case of failure the library will have to seek credit note for canceled titles. The credit note is to be forwarded to the finance office along with the invoice to work out the amount due for payment. Cancellation order should be from the next volume and not in the middle of the current volume.

iv) **Back Issue Order**

Orders for back issues are for serials earlier not in subscription list or for issues which are lost/damaged, or were not reported when they were not supplied under subscription. Need also arises for ordering supplements which are not covered under subscription.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with the answers in given at the end of this Unit.

15)   What are the three type of order for serials?

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v) **Payment and Refund**

Early settlement of suppliers' invoice is recommended for the following reasons:

1)   It helps to foster good relations with the supplier,

2)   It ensures continuity of the supply of serials,

3)   Advantage of special discount may be available under early payment system.

As explained earlier, subscription dues are, in most of the cases, paid in advance. Indian agents for foreign serials are required to make payment to their counterpart in foreign country in advance therefore they ask libraries for advance payment of their invoices.   .

Some libraries, as a safety measure, enter into a written agreement about the payment and claim refund of the amount paid if supply of serials fails to materialise. The following steps are taken to pass the invoices for payment:

1)   The suppliers' invoices are checked against correctness of each title, their supply position, subscription rates and, in case of foreign currency, their conversion rates.

2)   Invoices details are recorded on the receipt record of each title for future reference in case of any dispute.

3)   Invoices are finally entered in a bill register.

4) One copy of the invoice is filed vendor wise, the second copy is filed date wise and the Third copy, which is actually the first copy of the set, is sent to the finance office along with a copy of the order, for payment.

5) Credit note sent by the supplier for cancelled subscription should also be enclosed with the invoice.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with the answers given at the end of this Unit.

16) Describe the payment process of suppliers invoice.

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vi) **Receipt and Registration**

- The mail is checked for address and opened on daily basis. Issues are verified for any enclosures such as credit note, supplementary bill for revised subscription rate. Issues are also checked for correct copy of the serial. Issues with defect or damage are separated and intimation is made to supplier for replacement copies for the same.

- All issues are arranged alphabetically by title for registration.

a) **Registration Process**

Each issue is entered in registration record. There are different methods of registration record beginning with register to ledger to card forms. Libraries select the one they consider more appropriate for their needs. Once the registration is complete and check-in done, Library stamp is put on each issue. Next the issues are sorted for display and for putting in the box/racks for storage. Those meant for display are put up on display racks. Every library decides titles which should be put up for display. Loose issues are either put in boxes or put in storage device. Display racks with built in system for storage under the display planks are also used for storage of loose issues.

b) **Claiming for Non-receipt**

Making claim for non-receipt of serial on due date must be taken up promptly with the supplier. For this purpose registration system adopted must be such that it alerts non-receipt automatically. But before deciding to write reminder each case must be studied for its arrival routines. Possible delay due to postal system working should not be overlooked. Regularity of publication, country of origin, etc. should also be taken into account before writing for replacement. The check-in record should be able to record claim information, for follow up, till the replacement is received. In case replacement is not made, due to un-availability of the issue with the publisher, library may think of acquiring it as back issue acquisition.

c) **Registration Methods**

A number of registration systems are available for registration of serials. Library with small number of serials may use a register where a page is assigned to one title. Register with index pages are available in the market. The index page is used to identify the page on which a particular title is to be recorded. The top of the page has complete information about the serial for ease in correspondence.

A permanent ledger system may also be used for recording purpose. The register with a few pages assigned to each alphabet may be used for recording titles with a specific alphabet. In case of entering titles is in numerical order it should be supported by an alphabetic index at the beginning pages. Each of the two register system will require some sort of check in device for identifying in time non-receipt of a particular issue.

Card systems

The two card systems which are popular in India are known Three Card System and Kardex system. The Three card system was developed by S.R. Ranganathan while working in the Madras University Library. The system functions with three cards, Register card, check card and classified index card.

A) **Three Card System**

• **Register card**

The top of the card provides complete information about the serial the supplier and payment details. The lower half and verso of the card has columns for entry on receipt of individual issues. The details recorded at the top help in providing information for correspondence regarding non-receipt, invoice, or any other problem. The cards are arranged in tray in alphabetical order.

• **Check Card**

Each registration card has a corresponding check card. The check card contains the following information: Title, periodicity, volume and issue number, date of reminder, initials of the dealing staff.

Check cards are kept in a tray. The tray has four guide cards for each month to represent four weeks in a month. The check card corresponding to a particular serial is placed behind the expected week of the expected month of receipt of the serial. Once a serial is received and registered, the corresponding check card is moved behind the next expected week of the next expected month. If receipt position of serials is regular all cards behind a particular week would have moved out to behind the next week guide cards. If still one or more cards have not moved out it means issues of these serials have not arrived on due date and a reminder is due. After reminder the check card is moved for placing it behind the next expected week guide.

• **Classified Index Card**

The following information is contained in the classified Index card:

Class number, annual subscription and periodicity; title, vendor and publisher, volumes available; index, etc., supplements, etc. The cards are arranged by

class number. Classified cards show holding of the library for one particular title. These cards also inform the number of serials in a subject being acquired by the library.

B) **Kardex**

It is the other card system for recoding receipt of serials in libraries. The system was supplied by Remington Rand Co. It comprises two cards, bottom card and top card. The cards are kept in a steel cabinet. Each unit consists of 10 trays, holding 504 card holders possessing sliding dust cover and locking device. For each serial publication there are two cards, namely bottom card and top card.

- **Bottom card**

  It contains the following information:

  Name of the library, frequency; year, volume and issue number, title, index reminder, volume per year, location, nature of binding, volumes in binding, vol. library has, vol. library lacks, months from Jan. to Dec.

  Its function is to inform:

  i)   holdings of the library,

  ii)   latest issue received in the library,

  iii) gaps in the holdings,

  iv) location of the volumes and issues,

  v)   Information of need for reminder.

  The card is fixed in the punched holes of the card holder and plastic tab is put at the month when next issue is due. Bottom Card fulfills the following purposes:

  i)   Holding of the library,

  ii)   The latest issue received in the library,

  iii) Gaps in the holdings,

  iv) Location of the volumes and issues,

  v)   The plastic tab indicates when the reminder is due for overdue issues.

  Bottom cards are arranged alphabetically by title. Printed on both sides the card provides space for recording 20 volumes.

- **Top Card**

  It is fitted opposite to the bottom card and lies on the verso of the next card holder such that when any card holder for a given title is lifted, both cards come face to face with each other. The top card serves the purpose of keeping record of payments made to the supplier. These cards are printed both sides covering information for 20 volumes.

  The top card contains the following information: Volume number; date of publication; date of receipt of bill; voucher number; amount of subscription along with date of payment; name of supplier.

Registration method

When an issue is to be recorded the requisite tray of the bottom card is taken out from the cabinet and the date of receipt is noted in the appropriate column, the coloured tab is pushed towards the right side. If the issue is not received the tab remains in its earlier place and after the due date a reminder is issued and a note is given in the appropriate column of the Top Card.

Self Check Exercise

Note: i) Write your answers in the space given below.

   ii) Check your answers with the answers given at the end of this Unit.

17) Explain the function of the Check Card.

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18) Explain the structure of Kardex system.

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vii) **Binding of Periodicals**

Serials are published with different periodicity. A serial may complete its volume in six months, in one year or in two years. The span of year of a serial may not always coincide with calendar year. Once a volume is complete it kept for binding both to safeguard against loss of individual issues and also for convenience of use. Although binding has been the traditional method of preservation, the experience shows that binding if poorly done hampers both reading as well as in getting photocopy of the required article. According to Clive Simmond, librarian of the Cambridge University Library, "traditional binding process may not always be either appropriate or possible". It has been suggested that the issues might be tied up as a bundle and kept in a box. The Library of Congress has developed Phased box constructed out of one piece of acid free card board for keeping serials.

Serial are ready for binding once all issues of a volume have been received. Before the volumes are sent for binding it must be ensured that:

- All issues of a volume are in the bundle.

- Issues are arranged in correct order.

- Papers in the issues with advertisements have been removed from each issue.

- Title, content and index of the volume are placed before the first issue.
- Only section stitching should be done.
- Indication on thick volume that these are to be bound in two parts.

viii) **Technical Processing**

Technical processing of serials which includes both cataloguing and classification are no different from that of monographs. Once the volume is complete and put in the form of a single unit through binding or bundling these are to be classified like a book. The AACR-2 and MARC format have provided guidelines which should be adhered to for cataloguing.

In this Unit, we have learnt how the various functional components of circulation systems are regulated, controlled and operated. The actual operation may vary from library to library depending upon the resources and policy of the library.

We have also seen how the charging methods evolved, and the pros and cons of the two most widely used methods. To facilitate smooth and efficient functioning of the section, the section provides various other services such as reservation, renewal recall, etc. Circulation section also maintains various records and statistics which are helpful in planning library activities.

6.5 SUMMARY

Resources acquired by a library need certain processing before these are released for use and are suitable for access by library users. The processing work is carried out in two parts, physical processing and technical processing. Technical processing is concerned with bringing some organisation in the resources to facilitate easy access to the require materials. After organisation need arises to develop tools which shall help in confirming what is available in the library and where to find them. The technical processing includes classification and cataloguing of the materials. Both these functions are carried out according to certain codes (classification and cataloguing) selected by a library for the purpose. Both the jobs require personnel of high caliber who have understanding of the universe of knowledge as well as the psychology of users in searching materials in libraries. The diligence is not only needed in using the two codes but also in recording the call number at various places in the book but also in filling the cards as per approved filing policy of the library.

The Unit describes the scope and functions of the circulation section. The major function of the circulation section has been charging and discharging of materials available for circulation. To regulate the system for smooth and equitable service the section has developed certain control system. Reservation, renewal and recall are some checks, operated by circulation section. The section also maintains records of books borrowed and returned on daily basis.

Serials are an important part of library collection. But their acquisition and control requires special administrative steps and much alertness. Due to certain peculiarities in their publication their control and preservation is assigned to a separate section. Unlike books there are three different types of serial orders for serials, order, renewal and cancellation. Normally serial suppliers require advance

payment. Libraries generally make an agreement about terms and condition of supply. Receipt and recording of individual issues are done either in register or on cards. Depending upon the number of serials receive by a library. The two popular card methods of receipt are Three card system developed by Dr. Ranganathan and Kardex system of the Remington Rand co. Serials are bound in volume after all the issues of a title have been received by library.

Illustration 1

Sample page in the Ledger System

Periodicals Register				
Title :			Periodicity :	
Publisher :			Subscription :	
Sponsor :			paid	
Supplier :			Period covered :	
Volume	**Number**	**Date of publication year month date**	**Date of Receipt**	**Remarks**

Illustration 2

Card used in the One Card System

(Recto)

Title:									Periodicity:			
Publisher:									**Supplier:**			
Vol & year	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec

(Verso)

Title:						
Vol & year	Subscr Amount	Bill No & Date	Voucher No. date	Reminders sent	Bound upto	Remarks

Illustration 3

Cards in the Three Card System

The Register Card

Title			Payment		
Vendor			Vol or Year	Vouch No. & Date	
C N Period in weeks Order Grace Weeks No & Date					
			Ann. Subs		
Vol & Number	Date of Publ.	Date of Receipt	Vol & Number	Date of Publ.	Date of Receipt

The Check Card

Heading				Period Grace Weeks			
Vol & Number	Due Week	Week of Rem	Lbn	Vol & Number	Due Week	Week of Rem	Lbn

The Classified Index Card

Cl No.	Ann Subs	Per in weeks
Title		
Vendor		
Publisher		
Vol Available		
Indexes, etc.		
Supplements, etc.		

Illustration 4

Cards used in the Kardex System

The Top Card

Title	Department
Publisher and his Address	Country of Orgin
	Volumes per year
	Nos. per Volume
Agent and his Address	Subscription Rate
	Periodicity
	Day SUE Gift/Exchange

Order		Subscription Particulars				Particulars of Invoice/Bill				Remarks
No.	Date	Year	Number	Date		Number	Date	Amount	Paid on	
				Begins	Exfirs					

Back Volumes in Stock   **Binding Record**

Year	Value	From	To	Vol Nos. Sent		Year	No. of Issues Sent	Sent on	Recd on	Accession No
				From	To					

Kardex Periodicals Control

The Bottom Card

Title													Subs. No.			
Year	Ser	Vol	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	T.P.	Intls.

Title												Frequency	Copies Received Till which Period											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

KARDEX SIGNAL CODEG }

Graph-A – **Matic Signal received Title which period 1/4"**
Crimped Signals:
Red – **When Subscription to be Renewed**
Blue – **Foreign Language other than English**
Pink – **Journals Received on Exchange**
Green – **As free copies**

**Kardex Periodicals Control
Supplied by
Systems Division**
REMINGTON RAND OF INDIA LTD.

Illustration 5

Binding Pecullarities Slip

Title	
Volume Number	**Year** **Class Number**
Covering Material	
Clubbing or Splitting peculiarities, if any	
Assembling peculiarities, if any	

6.6   ANSWERS TO SELF CHECK EXERCISES

1) The need for processing is due to following reasons:

    i)   Growth in resources,

    ii) Emergence of interdisciplinary and multi disciplinary subjects,

    iii) Facilitates analytical approach in identifying materials,

    iv) Strengthens materials against deterioration.

2) Libraries classify documents due to the following reasons:

    i)   Organisation for efficient access,

    ii) Restore order disturbed during use of the sources,

    iii) Facilitates merging new addition,

    iv) Brings continuity in organisation work.

3) The routines of classification are as follows:

    • Checking duplication,

    • Forming basic class,

    • Constructing class number,

    • Constructing book number,

    • Identifying subject headings,

    • Review of call number.

4) The areas of bibliographical details of a book are:

    • Title and author;

    • Edition;

    • Imprint;

    • Collation ;

    • Series;

    • Note;

    • ISBN, binding, price.

5) Cataloguing is needed due to following reasons:

    i)   Help choosing specific title,

    ii) Supports multiple approach,

    iii) Information on amount of materials on a subject,

    iv) Information on how up-to-date is the material.

6) Physical processing refers to various jobs carried out to make a book ready for use by a reader.

7) Routines of physical processing are as follows:

    • Stamping,

    • Pasting various special stationary to the book,

    • Noting call numbers,

- Filling catalogue cards,

- Preparing list of addition.

8) Circulation through Day Book or through ledger system presented problem of identifying location of books out on loan led to the development of book card.

9) The book and borrowers card are presented to the counter. Counter staff removes book card and puts it in the borrower's card, stamps due date on the date slip in the book and gives the book to the borrower. The book card together with the borrower's card are filed behind date guide in the charging tray.

10) The book card in the Browne system contains only details of the book. In Newark system book card has a column for writing membership number of the borrower.

11) **Browne system:** 1) Charging process simple, 2) reminder sending easy, 3) issue statistics can be prepared easily, 4) Reservation recalls easy, 5) User's signature not required.

   Newark system: 1) Record of borrowers uses permanent, 2) Books use record available even when the book is out, 3) Several people can issue books at a time.

12) Books not available in library are can be provided to members, the books are required to be consulted in the library only.

13) Reservation, Recall, Renewal, Reminder, Overdue charges.

14) Peculiarities of serials are as under:

   - Core titles are ordered only once by a library,

   - Selection of suppliers is limited to agents,

   - Serials undergo changes in periodicity, title, sponsoring bodies, merge with some other title, and break in publication,

   - Published in parts.

15) Types of orders are as follows:

   i) New subscription, ii) Renewals, iii) Back issue

16) Payment of invoice procedure includes:

   i)   Checking invoice for title, supply position, subscription rate, conversion rate
   ii) Noting on registration record,
   iii) Entering in bill register,
   iv) Enclosing credit note if any,
   v)   Transferring to finance office.

17) Functions of check card are:

   - Keep watch on supply,

   - Keep record of reminder.

18) Structure of kardex:

   Consists of two cards, Bottom card and Top card,

   Bottom card is used for registration and reminder and Top card contains detail of payment.

6.7   KEYWORDS

Back Issues	:	Serial issues not supplied and not available for replacement; issue supplied but found lost issues not covered under subscription.
Check Card	:	Second card in Three Card System used for ensuring regular supply of serials.
Check in	:	Record for keeping an eye on supply of serials.
Registration	:	Recording receipt of issues received in the library.

6.8   REFERENCES AND FURTHER READING

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UNIT 7 PHYSICAL INFRASTRUCTURE PLANNING

Structure

7.0 OBJECTIVES

The purpose of a library building is to provide functional space for storage of resources, readers and staff. The space however also performs a social function of providing a place for social interaction among the library users. This social function will continue to remain even after conversion of library resources in digital form. Construction of a library building requires selection of a site, development of design by an architect and construction of the structure.

Care is taken in designing that the building is secure as well as provides an environment that is safe and healthy for all those who are going to use the building.

After reading this Unit, you will be able to:

• describe the changing design in library buildings over a period;

• discuss the purpose and need for a library building;

- explain the process of planning a library building;

- highlight the stages through which the construction proceeds;

- describe the criteria applied in allocation of space for various functions of a library; and

- identify the provisions needed in the building for the safety of resources and for an environment which is not injurious to the health of the occupants.

7.1 INTRODUCTION

Library as a social institution is a reflection of an urge inherent in human beings to record and preserve for wider dissemination of new knowledge acquired through observation, discussion, experimentation and deep thinking. The ongoing search throughout the history in the adoption of new medium for recording knowledge is an indication of desire in mankind to find a medium which is capable of survival and at the same time which could reach a wider public expeditiously. An equally if not more important need was to put these records at a place where it was accessible to people. The place now called library has thus played a significant role in generation, preservation and in dissemination of new knowledge.

Building is one of the most important parts of the library system. The design of library building has been changing from the post World War-I from a monolithic building to a building system scattered over a wide area due to the improvement in storage and communication technology. The Unit covers space requirements for a library and the guidelines that determine the placing of various parts of the library. Clarification has been provided about how a brief for the building is developed into a blueprint for the building and who are the people who are involved in finalising the blueprint. One of the most important decisions in regard to the building is the selection of site for it. The building reaches to completion by passing through the various stages as is explained in the Unit. Apart from provision for information and communication technology needs the building must have a disaster management plan .You will also know the importance of taking up an insurance policy for the library. Library also needs various types of furniture and equipments for carrying out its functions.

7.1.1 Need for Library Building

The need for building arises to house collection of reading materials available in various forms, to provide space for users, who visit libraries in search of information on topics of their interest and also to provide space for staff engaged in the job of acquisition, organisation and facilitation for access to these resources. The above three needs have been traditionally the principal factors behind construction of library building. But the developments during the second half of the Twentieth Century in the areas of information generation, communication and storage and heralding it as the " Information Age" have put a question mark on the very need for buildings. In an emerging "paper-less society" where libraries are going to be "without walls" the very idea of thinking about a building appears to be irrelevant activity. But a deeper reflection on the functions of library makes one realise that such thoughts occur only due to a wrong comprehension about use of library as merely a reading space. Libraries are not wholly or even primarily for information. They are about preservation, dissemination and use of recorded

knowledge, in whatever form it may come, so that humankind may become more knowledgeable. Further, libraries are not providing space for study of recorded information only. Libraries provide an atmosphere for scholarly pursuit. Working in library room also offers opportunity of working among fellow scholars of same discipline .Further, libraries have been extraordinarily successful social space where litterateurs, scientists, artists and art connoisseurs come together to influence and get influenced through exchange of views and ideas. Change in the forms in which information and knowledge are recorded has been changing throughout the history and libraries have successfully adopted themselves with every change. Even talking about the books the facts are that publishing has not come to a standstill position with the arrival of the age of digital sources.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with the answer given at the end of this Unit.

1)   State the need for library building.

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7.1.2   Changing Concept of Library Building

If libraries have withstood changes in media for recording information and knowledge from clay tablets through papyrus, silk to palm leaves, to papers and films in frame as well as in spools, surely these are going   to survive through the digital era as well. Thus, there has been a need for a building for library through all the various stages through which the recording of human knowledge has travelled and is likely to travel in future.

But the changes in storage design and in communication have also led to changes in design in library building. The style of impressive palatial structure has now given way to functional buildings. The first major change occurred in the Post-War years when fixed building design was replaced by flexible modular structure. Modular design facilitated space adjustment as per requirement of the library. The pressure for space in urban areas on the one hand and space being no more an inherence for transfer if information has thrown up the concept of dispersal of collection. This has brought another change in design. Now, in place of one building providing for accommodation for all types of materials in the collection, collections are stored in a system of buildings. In the face of changes in communication technology dispersal of collection to more than one building is no more a hindrance to access.

The concept of dispersal of building has gained acceptance because of change in the way readers now look at the library. Earlier users regarded librarians as over protective about their collection. Now there is a keen understanding about the role of the librarian in the research process. Emergence of new communication

technology has helped improve the nature of services offered by libraries. Users now want information irrespective of form of document, location of document and time of their requirement. The only criterion is relevance, accuracy and expeditious access. The size of collection of a library has lost its attraction for the contemporary user community. The library, in place of an isolated building, is now part of a library system. Yet another change in users' attitude is development of an urge for contact with scholars who share their interest. In this perspective the contemporary library building has to be an "intelligent library building that maximises the efficiency of the occupants while at the same time allowing effective management of resources with minimum life time cost".

7.2   SPACE NEEDS OF A LIBRARY BUILDING

The first consideration in a new library building is to have a clear idea of purpose of the building. Keyes Metcalf's Planning Academic and Research Library Building, a classic on the subject, identified main purposes for which a building is needed:

- Protection of books and collection of other records from poor environment and mishandling;

- Housing of books and other collections in variety of accommodations for ease of access;

- Accommodation for readers and other occasional visitors who need immediate or frequent access to the collections and services;

- Provision for staff who select, acquire, organise and care for servicing the collection and who aid readers in their informational needs;

- Quarter for ancillary functions such as photocopy services, bibliographic instruction, audio visual material preparation, computer support facilities, etc.

- Quarter for library administration and business offices, such functions as personnel, finance, fund-raising, publications of graphic or signage, building operations, security, supplies, mail and delivery service, etc.;

- Study, research and writing quarters for students, faculty and visiting scholars;

- Space to publicise resources or services through exhibits, lectures, publications, etc.

- Structure to serve as a memorial to an individual and symbolism of institutions academic life in pursuit of scholarly achievements.

Implicit in the above stated purposes are the space needs for a library. We may regroup purpose as below to get the idea of space need:

- Space for users (4, 8,2)

- Space for properly secured collection (1,3)

- Space for staff (5, 7)

- Space for services (6,9)

In the working for requirements of space for above four broad groups we should keep in mind and give provision for:

- Non-assignable space such as entrance lobbies, corridors, lifts well, stairs, etc.

- Space for furniture and equipments be added appropriately under services.

The total space requirement for a library building may be worked out by adding the above space needs with the help of available standards at national and international levels. The major space needs come from storage area for collection, accommodation for the user community and the staff. In planning a library building generally space division between the collection and the user is kept in the ratio of 40: 60. Similarly provision for readers in academic library is kept in the range of 10% to 20% of the total enrolment. In American Universities often it goes up to 30% .The standards developed prior to the developments in ICT, have to be adjusted to the situation developed with increasing use of e-sources .Normal space need of a reader is 25 sq. ft.per reader. But for a computer user this will go up to 30 to 35 sq. ft. per reader. Similarly space calculation for collection storage is 10 ft. per 100 books and 15 ft. per 100 periodical or large size books. The ratio of e-journal and e-books will have impact on space requirement for the collection

The following factors should also be taken into account for working out space requirements:

- Library policy regarding access to stacks (open or closed)

- Net growth rate of collection (addition—weeding out)

- Availability of auxiliary space for storage of collection

- Ratio of electronic resources in the total collection

- Shelving system (compact or ordinary system)

- Policy of participation in net work system.

Self Check Exercise

Note: i)   Write your answers in the space given below.

    ii)   Check your answers with the answers given at the end of this Unit.

2)   List purpose of library building as described by K. Metcalf.

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3)   Explain how to work out total space requirement of library.

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7.3 SPACE MANAGEMENT

Considerations for Internal Allocation of Space

Internal allocation of space on completion of building requires very judicious planning. The foremost point for division is the ratio between space for reading material and space for user community. The generally accepted norm is a ratio of 40:60. Another point is space requirement for technical and administrative functions. The quality of public service depends directly upon the internal organisation and efficiency of the library. The UGC Committee on University and College Library has given in detailed guidelines for spatial contiguity of different rooms of a library. Anthony Thompson suggests that all the departments should be divided into three areas; Quiet Area, Talking Area and Noisy Area. In space management relationship between the two departments should be based on these characteristics of the area. The following points should be taken into account while deciding allocation of space (Mount, Ellis, *Creative Planning of Special Library Facilities*.1988). ITC system needs space for office machine room for servers and other mission-critical equipments, general work space and room for storage. All these spaces should be preferably adjacent or within close proximity to each other.

- **Noise:** The areas earmarked for study should be far from circulation area. Similarly supervisory staffs require area suitable for confidential communication.

- **Traffic flow**: Movement in, out and around should be kept in mind in placing working areas.

- **Security:** The need for supervision and overseeing of particular area will have an influence on the location for special collection, electronic and other equipments.

- **Convenience:** The areas which are expected to receive frequent visit by staff and users should not be placed in distant corners.

- **Critical distances**: The details of the floor plan layouts will be influenced by standard clearances for furniture and shelving arrangements.

- **Equipments:** Space required for electronic and electrical equipments need special light, provision of fresh air, electrical connectivity and special furniture space for work areas.

- **Interaction**: Requirement of interaction between staff and users will affect the location and prominence of enquiry/ information desk.

- **Economical use of the space**: The need for the economical use of the space may call for a very formal arrangement of seating and shelving space.

- **Lighting**: Interior design, stack location and selection of furnishing are influenced by availability of natural light. Areas with tinted windows will need more provision for light aid. Different functional areas will need provision of different light levels.

Note: i)   Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4)   List the points that should be taken into account in allocation of space.

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7.3.1   Utilisation of Space

Space available in a library building is divided on functional basis. In this context Prof. P.N. Kaula's proposal with some modification is as follows:

Service area	Circulation Area
	Reference and Bibliography Area
	Public Catalogue Area

The actual space under these areas will be affected by the extent of automation carried out by the library

Study Area/Readers activity Area	Textbook storage-cum Study Area
	Periodical Display and Study Area
	Electronic materials Study Area
Administrative Areas/Staff Activity Area	Acquisition Area
	Technical processing Area
	General Administration including Upkeep and maintenance Area
Collection Storage Area	Main/ Basic collection
	Non-book Materials
	Official publications (National/International bodies)
	Special Collection Area (Rare materials and photographs, local history, art books, non-book materials, private papers of eminent people, etc.)

7.3.2   Financial Resources and Space Requirement

The foregoing discussion gives us an idea of space requirement or demand side of the building plan. But a more important factor in finalising the proposal for building is the available financial resources. It is therefore rightly said that a proposal should contain a "sensible wish list". The capital cost of the building is a "considerable sum of money" which has to be secured and the expenditure must be kept within the agreed budget.

7.4   PLANNING FOR A LIBRARY BUILDING

The process of planning a building begins at the idea level in the mind of librarian, once s/he feels a need for the same. The idea is given concrete shape as a written proposal. The written proposal is thus culmination of librarian's odyssey to give shape to the idea. The proposal has to be based on:

a)   A close study of functioning of the library over a period of time, taking into account the various bottlenecks that were faced during the past years and, about which one is reminded while peeping into, the annual reports of the library;

b)   A close study of existing literature on the topic;

c)   A wide-ranging consultation with internal staff, management /faculty members, and known experts on the subject;

d)   Visiting libraries to observe adoption of the space and its impact on the day to day services; and

e)   Study of user behavior and preferences based on circulation and reference service statistics, study of user visit and library traffic pattern and study of literature on user behavior and preferences. However user studies should be carefully selected to cover also those studies which relate to the e-sources period, as now there is a marked preference among users for e-sources over print sources.

The written proposal which is called, pre-planning brief is according to Prof. Kaula "a description of the primary elements of design, the interrelationship between the various areas, their estimated size and helpful location. It also describes the philosophy, principles, requirements and limitations of the proposed building". It includes:

•   the general features, the type of library and its status i.e. is it a new developing library, or a new service is to be started at the location,

•   nature of users, type, use pattern, purpose, etc.,

•   construction features, buildings life span, usual feature, provision for the physically disabled, HAVC system in closed areas,

•   special requirements,

•   services to be offered.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with answers given at the end of this Unit.

5)   List out the points to be considered in pre-planning of library building.

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The idea of the building takes its physical shape by passing through three distinct stages viz. planning, design and construction. There is another, often neglected, stage of post- occupation evaluation *vis-a- vis* the original idea or the pre –planning brief. The British Commission for Architecture and Built Environment has split the stages for construction into *six stages*:

i) **Preplanning Stage:** Assessing the need, thinking about alternatives, making a case and securing financial resources (librarian's job).

ii) **Planning Stage:** Writing and developing architects brief, selection of architect and selection of site (librarian and architect).

iii) **Design Stage:** Translating the conceptual brief into a working drawing (architect and the librarian).

iv) **Construction Stage:** The erection of the building (builder, architect and the librarian).

v) **Occupancy Stage:** Moving in and making the building operational (librarian, furniture, equipment and systems suppliers, removers).

vi) **Post Occupancy & Evaluation Stage:** (Librarian, architect, the builder and the users).

The actual operation of construction may not proceed exactly in the above described sequence as revision in design may become necessary and occur at any stage.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

6) List out the stages through which building reaches to its physical shape.

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7.4.1 Building Planning Committee

Although conceptually library building is the brain child of the librarian but for giving it a physical shape it needs input from diverse quarters. In other words there is a need to have a planning committee comprising representatives of all those persons who will facilitate its construction by providing architectural, financial, aesthetic, and utilitarian view point in its designing. The committee initially constituted may undergo changes as the work of construction proceeds and need arises for such changes. Thus, generally building committee consists of

• librarian,

• architect,

- a representative of the library authority,

- engineer of the organisation/institution, and

- one or two senior staff of the library.

At a later stage involvement of representatives of the user community and an interior designer will prove very productive.

The librarian is to present a comprehensive list of requirements that needs fulfillment by the building. The job of the architect is to translate the idea plane requirements into a functionally elegant interior and aesthetically pleasing exterior of the building. Architect is also expected to ensure economy, both in construction cost as well as the cost of maintenance of the building. The architect also plays a major role in selection of a suitable site for the structure. The presence of the library authority representative will ensure easy flow of required financial resources. The engineer of the parent body shall be helpful in ensuring proper electrical wiring system for the required work stations, server location, and connectivity for monitors and LAN, WAN, etc. User representatives shall provide input for provision of such facilities in the building that will ensure creating an atmosphere conducive for study and research. Library being a furniture and equipment intensive building, planning of functional areas in the building is equally an important part of the planning. The interior designer in the committee shall help in designing functional areas, types and extent of space, location and accommodation of equipment, types of lighting and other electrical and mechanical support systems.

Once the work of construction is underway a team comprising some internal staff and a member of the finance department may be constituted to function as a forum for discussing day to day building- related matters and keep authorities informed on the progress in the work. The committee may also discuss changes necessitated during the construction phase.

7.4.2 Location/ Site Selection

The first step in construction of the building is to select a proper site for location of the building. It is said that a good location is essential to fulfillment of the library's mission of service to its community. The success of a library is principally attributed to the right location chosen through the joint efforts of the planners, librarian and others. The question of selection of site is taken up only after the decision about the functions and the type of building has been finalised. Though the decision is a collective decision of the planning team but the advice of the architect is considered to be of immense value in finalisation of the decision. In addition to the architect's brief the following factors are considered helpful in selection of site:

- **Cost:** In case of public library it is the actual cost and in case of academic library it is alternative uses of the chosen space. But the cost has to be seen in the perspective of accessibility, the travel distance and distribution service point.

- **Accessibility:** In case of public library it should have closeness to public transport system and, convenience of parking facility to physically disable. In case of academic library closeness to faculties is more important.

- **Size and shape:** Site with large space is helpful for future expansion, provides quieter atmosphere, better natural light, and eliminates risk of fire from adjacent building.

- **Relationship with other buildings:** In height, colour, and design the building must blend with neighboring buildings. In case of public library a desire to make the library building part of the other local authority buildings to save on cost.

- **Physical suitability:** Considerations about sub soil water, seismic zone, closeness to river, weight bearing capacity of soil, etc. are important considerations in site selection.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

7)   State the factors that are required to be considered in selection of site for library building.

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7.5   QUALITY ASPECTS OF LIBRARY BUILDING

Traditionally libraries are categorised as public, academic and special library. The categorisation is based upon the type of users, range of the main collection, and the level and range of services offered by the library. These differences play a role in the design for building. Therefore there cannot be a model building for all requirements and all types of libraries. But there are certain basic requirements which must be ensured in the building design irrespective of category to which the library belongs. Though originally these were identified by internationally renowned architect, Henry Faulkner-Brown, these were later revised by A. McDonald to bring them in consonance with contemporary situation of emergence of hybrid information sources forming part of the library collection. According to McDonald, a library building must be:

- **Adaptable:** Flexible space so that its use could be changed easily,

- **Accessible:** Social space which is inviting, easy to use and promotes independence,

- **Varied:** With a choice of learning environment and between different media,

- **Interactive:** Well organised space which promotes contact between user and services,

- **Conducive:** High quality humane space which inspires people,

- **Environmentally Suitable:** With appropriate conditions for readers, books and services,

- **Safe and Secure:** For people, collection, equipments, data and building,

- **Efficient:** Economic in space, staffing and running costs,

- **Suitable for information technology:** With flexible provision for users and staff.

In addition to the above, the following general considerations may also be taken into consideration in designing a library building:

- People move horizontally more easily than vertically;

- Public services, where possible, are better placed on ground floors;

- All immovable features of the buildings such as elevators, toilets, and stairs should be in one area of the building;

- As for as possible make one facility serve two purposes e.g. provide toilets at a point where they are accessible even when the library is closed.

7.5.1 Health and Safety Considerations

Library buildings, being public buildings are used by people of different age and physical abilities. Generally these are thought to be a safe place. But the building is potentially an unsafe place and therefore:

a) Proper provision must be incorporated for preventive measures against unsafe conditions in stairs, electrical wiring, and placing of various electrical equipments.

b) Efficient housekeeping and maintenance must be a regular practice in the library.

In this context the following points need consideration:

- **Air Quality:** The building design must provide adequate ventilation and free flow of fresh air.

- **Stairs:** Stairs and ramps must be secure enough with provision for strong hand railings.

- **Lighting:** Different areas in the library have different lighting requirements which must be provided. Proper and sufficient provision for lighting is essential for the safety of the building also.

- **Equipments and Furnishings:** Provision of adequate aisle width between and around equipments and furnishing must be provided to allow wheel chair access to the bookshelves. Electrical equipments within public access areas such as copying machines, microfilm reader printer, computers, etc. must be properly grounded.

- **Staff Health Consideration:** Working long hours in a building sealed for supporting interior atmosphere often leads to the so called "sick building syndrome" (SBS) or unhealthy reaction in staff. Building design and equipment design selected should bear such health hazards in mind. Chemicals used to control insects and for preventing plant growth, must be regulated and only those should be used which are not harmful to human beings and are legally allowed.

- Disability considerations: Building design should be supportive for people suffering from mental and physical impairments such as sight, hearing, and mobility and learning ability.

Note: i) Write your answer in the space given below.

ii) Check your answer with answers given at the end of this Unit.

8) What measures of health and safety considerations are incorporated in the design of library building?

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7.5.2 Impact of Developments in ICT on Library Building Plan

Developments in ICT and its impacts on library services have now made it necessary to incorporate in the building plan, ICT enabling provisions. The library building of electronic environment must be capable of supporting electronic workstation and communication. The planning team should prepare a complete list of electrical and electronic equipments by type, quality and location. Provision for neutralising the HVAC impact on the electronic equipments is an essential part of the ICT plan. The ICT plan will also take care of heat generating capacity of electrical equipments, humidity, wiring and varied light needs to building. For example a video-display terminal requires special lighting arrangement to allow glare-free reading; photo copy machine needs more humidity. It will be better if the planning team seeks advice of an expert in laying out wiring network bandwidth requirement and physical location. An up-to-date documentation of wiring, list of network sockets along with sockets which are operative should be maintained. The major points to be considered for exploiting new access, storage and communication technologies include:

- Number of power outlets more than is thought necessary at first stage of operation.

- A network system that can meet future demands for capacity and diversity.

- Storage and work space for repair and housing equipment in transit.

- Dispersed or clustered terminals.

- Building that permits the flexible installation, moving and adding of ICT system

- Cable/wire management.

7.6 DISASTER MANAGEMENT

Unit 9 presents a detailed account of disaster management. What is presented in this section is a glimpse of disaster management with emphasis on certain preventive measures. Disasters, manmade or natural, have been serious threat to the libraries. The library building therefore must incorporate in its building plan necessary preventive measures for such events. Study of the past disasters has made it very clear that whatever may be the nature of the disaster, the damages to

the library resources occur through water flooding or fire that results in the aftermath of disaster. The building design therefore should provide for safety against these causes. In choosing building site the foremost requirement is to study seismic nature of the area. Disaster management manual should be updated at regular intervals.

7.6.1   Fire Preventive Measures

• Adoption of principle of compartmentalisation of building structure.

• Provide for installation of warning system.

• Furnishing and furniture should be made of fire resistant materials.

• Electrical installations for lighting, power supply and for HVAC system should have quality control certificates and installation should be done by a license holder mechanic.

• Fire Extinguishers, both water and gas operated, and fire suppression equipments should be in place to meet any emergency situation.

• Provision of separate store for storage of inflammable liquid.

• As far as possible avoids wooden furniture.

7.6.2   Water Flooding Preventive Measures

• Building should have sufficient drainage over roof

• No water or drainage pipe over storage areas.

• Basement should be fitted with sump and pump.

• No provision for books or any rare material storage in basement.

• Ensure installation of automatic water warning system.

• Over head and basement plumbing system blueprints should be kept at a safe place for reference in emergencies.

7.6.3   Security Arrangements

Necessary security system should be provided to safeguard against manmade disasters. The interior of the building should provide maximum visibility of the public areas, more so of the rare materials area. Provision of adequate lighting inside and outside the building will ensure maximum visibility so essential for security purposes. Unwanted rear doors should be avoided. Open able windows should have security screen. Arrangement should be made to prevent unauthorised entry in electronic installations and electronic sources areas lest someone plays mischief with stored information. The library should have a system of regular patrolling inside continuous activity of the library.

7.6.4   Electronic Security

Library should provide security against unauthorised obtaining, removal alteration or destruction of computer stored information. In addition to protection against data misuse, security system should have provision against deliberate destruction of computer equipments. A simple way to discourage undesirable use is to place the machines in highly visible and well frequented area. Software's are available to electronically snoop on what users are doing at the computer.

Self Check Exercise

Note: i)   Write your answer in the space given below.

    ii) Check your answer with the answers given at the end of this Unit.

9)   State preventive security arrangements needed while planning/designing library building.

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7.6.5   Insurance Provision

Libraries are valuable properties and any loss due to disaster is a major loss. The library therefore must take up insurance policy covering building, equipments, resources furniture and fixtures the negotiation for the policy should be carried out by person knowledge able in insurance terminology. The library must prepare a complete inventory of all insured materials. The policy should be regularly updated for changing value of the materials.

7.7   LIBRARY FURNITURE

The UGC Committee on University and College Libraries has listed the following furniture for a library:

- Book Rack,
- Charging Desk with wicket gates,
- Catalogue Cabinet,
- Study Table,
- Chair,
- Periodical Display Rack,
- Book Display Rack,
- News Papers Rack,
- Encyclopedia/ Dictionary Stand,
- Atlas Stand, Book Trolley, and
- Side Rack for Carrels.

The report was prepared when major part of the collection consisted of printed books. The character of the furniture now needed in libraries has changed under the impact of changing nature of library collection. As far as older furniture are

concerned the need for these types of furniture is still there and the standards for their fabrication are available with the Bureau of Indian Standards. They provide standards for the quality of wood, dimension and materials to be used in their manufacture. Due to increasing addition of non-book materials and electronic publication in library collection some new categories of furniture have become essential. The new requirements for furniture include furniture for computer hardware, for audio and video storage and use, reading tables for microfilms and microfiche. Electronic publications reading room furniture should be suitable for video conferencing also. Reference desk, circulation desk and OPAC desk should be capable of handling electronic equipments and wiring suitable for future when Wi-Fi enabled lap tops will replace the older work station.

Library services now stress on extension services which require bulletin boards, signage display stands, show cases, video conferencing equipments and furniture, public address systems.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check you answer with the answers given at the end of this unit.

10)   List furniture required for ICT use.

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7.8   SUMMARY

Building is required to provide space not only for users, but also for stacking resources and for library staff to work and deliver services to customers. The design for the building begins with the brief prepared by librarian. The architect transforms the brief into a blue print. It is based on the space requirement of the library for carrying out its functions, for storage of materials, furniture and equipment and space for readers. The design for library building has changed a great deal from the nineteenth century concept of a monolith structure to a system of buildings scattered over a wide area. The finalisation of building design and the construction work is carried out under the guidance of a building committee composed of librarian and one or two senior colleagues, the architect and representatives of the authorities. The construction work is completed in five

stages. The success of the planning and the building that takes shape depends upon certain qualities in the building such as its adaptability existence of environment conducive to study and research.

The ready space in the completed building has to be appropriated on functional basis among various sections/ units such as reading room, textbook section, etc. of the library. The allocation of space for various requirements is done on the basis of certain guiding principles. National standards are available for space requirements of a library. Similarly there are certain basic qualities which must be there in a building. Library furniture is also prepared as per standard developed for them.

The emergence of electronic sources and developments in communication technology has created a debatable opinion about the futility of constructing a building for library. But such thinking is based on a very narrow concept of library. However, the building must be capable of incorporating and easily accommodating various features and fixtures of latest developments in ICT.

The occurrences of various disasters have now made provision for preventive measures and need for insurance an essential part of library building maintenance. As far as furniture is concerned, it is better to acquire from specialised firms in the country as per need than getting them made by local carpenters, The Bureau of Indian Standard has developed standards for various furniture items. Similarly equipments needed for storage of offline electronic sources are available from firms specialising in electronic goods furniture and equipments.

7.9 ANSWERS TO SELF CHECK EXERCISES

1) The main need for library building are as follows:

   i)   Urge in human beings to record and preserve new knowledge and cultural heritage,

   ii) Need for space for collection, users, staff for service to the collection,

   iii) Need for a place to stimulate scholarly and creative endeavour,

   iv) Need for a place to work in group of scholars of the same discipline,

   v)   A meeting point for scholars of diverse disciplines for interchange of ideas,

   vi) A place for social interaction and for developing intimate human relationships.

2) The purpose of library building as described by K. Metcalf are:

   i)   To protect collection from elements responsible for deterioration and loss of collection,

   ii) Housing collection in various accommodations for ease of access,

   iii) Accommodation for regular and casual readers, who need access to collection,

   iv) Accommodation for staff for oganisation and service to the collection,

   v)   Space for ancillary functions,

   vi) Space for extension services,

vii) A structure to serve as memorial to a social or scholarly personality,

3) Major space is required for users, for collection and for staff is:

- estimated on the basis of national and international standards,

- Space for users is calculated at 25 to 35 sq.ft. per user depending upon whether readers have access to computer or not,

- Space for storage is calculated at 10 ft. per 100 books and 15 ft. per 100 periodicals,

- Space is provided for readers between 10% to 20% of the total enrolment,

- Space allocation between collection and users is kept at the ratio of 40:60.

4) The main points that should be taken into consideration in allocation of space are:

- Noise: Study area should be away from circulation counter,

- Traffic Flow: Working areas should be located in far corner,

- Security: Special collection electronic equipment and such other areas needing vigilance should be located from where supervision is easy,

- Convenience: Areas needing frequent visit should be centrally placed,

- Critical distance: Floor plan should incorporate standard clearances for furniture and shelving arrangements,

- Equipments: Equipments areas should have provision for light, air and connectivity provision,

- Interaction: Convenience o interaction between staff and users determine placing of enquiry desk,

- Econnomic use of space: Seating and shelving arrangement should be formal,

- Lighting: Different functioning areas will need different lighting arrangement.

5) The following points are to be considered in the pre-planning stage of library building:

a) Close study of working of the library over a period of time,

b) Study of literature on the subject,

c) Consultation with staff, faculty and experts in the field,

d) Visiting libraries to study space use,

e) Study of user's behavior over a period.

6) The stages through which building reaches to its physical shape are:

Preplanning stage, Planning stage, Design stage, Construction stage, Occupancy stage, Post-occupancy evaluation.

7) The factors that are required to be considered in selection of site for library building are: Cost of site, Users accessibility, site size and shape, Relationship with other buildings, physical suitability of the site.

8) The measures of health and safety considerations are incorporated in the design of library building are: Air quality, stairs, lighting system, adequate aisle to allow wheel chairs, well grounding of heavy equipments, provision against SBS development and care in use of insecticides, provision for mentally and physically handicaps.

9) The following preventive security arrangements are needed while planning/designing library building: Maximum visibility in public areas, adequate lighting inside and outside the building, avoidance of unwanted rear doors, open able windows to have security screen, check point at electronic equipments and electronic resources areas, regular patrolling in the building, security against unauthorised access to computer stored information areas.

10) The following furniture is required for ICT use: Furniture for computer hardware, for audio and video storage and use, Microfilm and Microfiches reading and storage, furniture for video Conferencing, Circulation Reference and OPAC desks with provision for use of electronic instruments and connectivity for Internet.

7.10 KEYWORDS

Auxiliary Space	:	Space required for nonfunctional areas such as toilet, wardrobe room.
Dispersal System	:	Building plan where building complex is scattered over distant areas.
Equipment Intensive	:	Having a variety of equipments.
Fixed Building Design	:	Design where space use cannot be changed.
HVAC	:	Heating Ventilation and Air Conditioning.
ICT	:	Information and Communication Technology.
Modular Design	:	Design based on self contained unit which allows use of unit's space.
Paperless Society	:	Society where paper ceases to be carrier of information.
SBS	:	Sick Building Syndrome i.e. sickness due to long stay before computer in environmental controlled building.
Social Space	:	Place where users of different disciplines get an opportunity to meet one another.

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UNIT 8   MAINTENANCE AND PRESERVATION

Structure

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8.0   OBJECTIVES

After reading this Unit, you will be able to :

- describe preservation as an integral part of library management;

- discuss possible reasons for overlooking preservation needs in libraries in the past;

- explain the factors that have brought preservation to the centre of library's management of resources;

- identify various methods of carrying out stock verification; and

- discuss the advantages and disadvantages of stock verification.

8.1 INTRODUCTION

Preservation of library material is as important as collection building. Libraries are considered to be social memory of the society. Their survival is important for the generation and preservation of knowledge. However, the base for recording knowledge and information are perishable materials. These are affected by light, temperature, environmental pollutants, biological agents and human beings. In order to adopt measures that will ensure survival of the collection we must understand the role of these elements in causing deterioration and damage to library materials. In this unit we shall study how library materials gradually deteriorate, what are the factors that contribute to their deterioration and what measures should be adopted to prevent their deterioration.

The basic purpose of library collection is:

•   To serve as source for providing information and knowledge to library users visiting library in person as well as those seeking the same through phone or e-mail.

•   To function as a place of accumulation of human knowledge as part of the academic and cultural heritage of society. To serve the above two purposes the library performs two functions: a) Provide access to its resources and services with the help of various tools developed for the purpose, and b) Adopt various methods to ensure availability of the resources to the future generations. An efficient preservation of library collection, therefore, is an integral part of the management of library resources. In fact it is as important as acquisition and organisation of the resources.

Prior to the middle of the last century, libraries concentrated mainly on acquisition, organisation and facilitating access to the collection. However preservation in a way was implied in organisation as well as in facilitating access to the resources. Organisation of collection is planned, taking into consideration the need and behaviour patterns of the users. Obviously while organising the resources care is taken to safeguard it against damage. Resources are sorted by size, by nature of information, by category of users, etc. Most of these decisions ensure their normal safety from inadvertent action on the part of staff or users. Similarly in planning access, care is taken to ensure safety for all the resources including rare and fragile materials. But till the middle of the 20th century preservation as a planned mission in library management was paid very little attention.

Preservation or conservation, as it was called earlier, as a distinct activity was mostly associated with archives. Unlike libraries, archives had a distinctly stated preservation mission. An archivist, according to Sir Hilary Jenkinson, "has to take all possible precautions for the safeguarding of his archives and for their custody…Sir Hilary called it as the primary duty of the archivist". In the past, preservation was confined to binding of damaged books and/or lamination of fragile documents or manuscripts. Most books on library science discussed binding in much greater detail than preservation. In the past preservation was restricted to segregation and selective access to fragile and rare materials. Conservation was the generic name used to what we now call preservation and the preservation got its due attention in management of library resources in mid Twentieth Century. If we could identify one single factor that was responsible for this change it was the publication of *Deterioration of Book Stock: Causes and remedies by William J. Barrow* in 1959. Barrow disclosed that the raw material used for manufacturing

paper from the early 19th century was wood pulp which contained lignin a chemical substance and cellulose fibers. Lignin is chemically unstable and readily deteriorates when exposed to high temperature and humidity. Since most of the books published from the early 19th century onward were printed on paper made of wood pulp they were going to be unusable by the next century. The disclosure alerted the national level organisations in the Western Counties to the imminent danger that the libraries were facing. The U.S. Council on Library Resources funded several research projects on the problem .The Library of Congress, which found it was losing through deterioration around 77000 books a year because of the poor quality paper on which they were printed, launched a massive de acidification programme. The British Library supported Dr. F. Ratcliffe's project *Conservation: Need, Resources, Policies and Programme in British libraries (1982-1983)* on preservation at the Cambridge University Library. The European Community published a report entitled Library Policy for Preservation and Conservation in European Community in 1988.The US established Commission on Preservation and Access in 1986. In 1987 a film, *Slow Fire* was also made for general awareness.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

1) State how awareness about preservation developed in the 20th Century.

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The occurrences of a few natural disasters in quick succession causing large scale damages to some major libraries of the world also alerted libraries towards problem of preservation. The flood in River Arno in1966 that submerged the world famous collection of Bibliotheca Nazonale in Florence, in flood water and which made UNESCO organise rescue and restoration work for the Library on international scale, also catalysed the situation in favour of preservation. UNESCO came up with its Memory of the World Programme with explicit aim of promoting the preservation of documentary heritage of mankind. IFLA launched its programme on preservation, known as PRESERVATION AND CONSERVATION (PAC) at the Vienna Conference on the Preservation of Library Materials in 1984.The goal before the PAC is to "ensure that the library materials, published and unpublished, in all formats, will be preserved in accessible form as long as possible". Since its formation, PAC has held many regional level conferences; it has now shifted its headquarters from the Library of Congress to the National Library of France, Paris and opened regional centers at Washington, Caracas, Canberra, and Tokyo. It is also publishing a biennial news letter *International Preservation News*. In India a related activity was formation of Indian National Trust for Art and Culture (INTACH) in 1984. It has established a conservation centre in collaboration with the National Research Laboratory for Conservation of Cultural Property at Lucknow.

8.2 NEED FOR PRESERVATION

Libraries have suffered damage and deterioration of their collection throughout the history. Sometimes the cause is natural disaster and other times it is man-made, such as war. But silent damage through deterioration of paper, the leather used for binding and through bacteria, cockroaches and rodents have also been wide spread under preservation. Even then preservation as a major problem was not much discussed. Albeit need for preservation, by the name care for books, are found in books on Library Science. In fact, in early nineteenth century, quality of material available for recording words were superior and hence could overcome deterioration due to internal causes. This situation continued even during the period extending from 8th century to the beginning of the 19th century when paper had replaced all other media as base material for recording knowledge. Identifying the responsibility of a librarian, John Durie (1650) said that "to build collection, care for them and be dispenser to apply them for use". Randolph G. Adams wanted librarians to demonstrate a greater appreciation of books as an object of art". He expected librarians to accord "special treatment to rarities" and guard rare books against possible misuse by "unqualified reader". Books were chained with almirahs and one can still see chained books in some old libraries like the Library of Oxford. Dr. Ranganathan also had called care of books as the first service of the library in his book *Reference Service (1940)*. Thus, for a long time care and service, i.e. access, were considered of equal importance. Care was given rather more importance. Perhaps care had not yet become interchangeable with preservation, though concern among the librarians for safety of material did exist. It was not yet sacrificed for the sake of providing access.

By the end of the Second World War there was great surge in scientific research which brought better library service to the centre stage. Education was spreading in the society and thereby increases in demand for books. Libraries were under pressure for efficient access to results of new researches. Emergence of indexing service, documentation, SDI services, user education, open access, etc. on the one hand, and developments in technology like Xeroxing and microfilming on the other led to the balance of service swing in favor of access to the negligence of care i.e. preservation. However around this time major world libraries discovered that a sizeable part of their book collection belonging to the period from 1830 to early years of the 20th Century was under imminent danger of being lost due to acidic nature of paper on which these were printed. Surprisingly, the need for preservation now received worldwide concern. Libraries have been always considered social memory. Therefore, Ranganathan (1940) called preservation as a social need and emphasised the need to identify library as a social memory because it:

- helped transmission of knowledge to future generations,

- helped in the cumulation and further building up of knowledge from generation to generation,

- helped in the contemporary development of knowledge without any wastage,

- building of knowledge by unintended and purposeless repetition of effort and consequent wastage in research potential of humanity.

The essence of Ranganathan's views were echoed by John Agresto of the National Endowment for Humanities (US) in 1986 when he said " preservation of library and archival material is essential politically for the well being of democracy , for availability of primary source materials as a basis for good teaching." He further added that "preserving the past is useful and practical to us living". The preservation was now getting recognition as an important part of library management.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with the answers given at the end of this Unit.

2)   Explain why Ranganathan calls library social memory.

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8.2.1   Definition of Preservation

There has been much confusion with regard to the exact connotation of the two terms, conservation and preservation. Both have been used to describe activities in which libraries engage themselves to protect collection from deterioration and damage. The confusion could be traced to earlier their being alien to the profession of librarianship. For considerable period these terms have been referred to in the context of protection of archival materials only.

Preservation in the modern usage refers to applying all the various methods and techniques and ensuring such climatic environments, including ways of their storage, as would prolong life of the artifact as well as content of the materials. According to Clayton and Gorman "preservation is a generic term and includes all activities associated with the maintenance of resources and preservation of information content. This is in contrast to conservation which refers to the treatment of the artifacts in order to extend their usable life''. The use of the term preservation to denote an all inclusive effort is rather of recent origin. Until the last two decades of the 20th century the term conservation was used to describe "all attempt to prevent damage or deterioration or further damage to library collection. Preservation referred only to specific effort to not merely to stop but to reverse the various negative and unwanted effects of destructive chemicals and other agents that could destroy the library materials". The function of repairing "physical structure of the document" or the "artifact" to its original condition was restoration. As stated above, these terms were more frequently used in the context of archival materials. Even now the term preservation has not completely replaced conservation to refer to encompass all activities adopted to protect the library resources. Among the conclusion of Ratcliffe's report "*On Preservation Policies and Conservation in British Libraries*" one conclusion reads "Libraries should seek to inculcate conservation as a major policy matter…" (conservation impinges on virtually all aspects of library activity and given an appropriate

order of priority is very much a policy matter). Under conclusion to the recommendation is "libraries should press for the inclusion of education for conservation within the curricula of library schools…" The National Conservation Advisory Council, US has also used the term conservation as an all encompassing term which includes examination (assessment of items), preservation (action taken to retard …deterioration… by control of their environment and/or treatment of their structure) and restoration (action taken to return a deteriorated… artifact as nearly as is feasible to its original form….)" In a situation like this it is safer to use the three terms – preservation, conservation and restoration in the sense in which IFLA has used them in its publication *Principles for the Preservation and Conservation of Library Materials (1986)*.

Preservation includes all the managerial and financial considerations including storage and accommodation provisions, staffing levels, policies, techniques and methods involved in preserving library and archive materials and information contained in them.

Conservation denotes those specific policies and practices involved in protecting library and archive materials from deterioration, damage and decay, including the methods and techniques devised by technical staff.

Restoration denotes those techniques and judgments used by technical staff engaged in making good of library and archive materials damaged by time, use and other factors.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3) Explain why preservation was neglected for a long time.

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8.3 CAUSES OF DETERIORATION OF LIBRARY MATERIALS

The problem of preservation in libraries is a challenging job due to changing nature of its collection. For centuries new information and knowledge recorded on paper constituted almost the only form of library collection. It was only since the later years of the 19th century that the nature of the collection began to change. Microfilms joined paper to accommodate back volumes of serials and news papers. Microfilms were also used to create surrogate for manuscripts and other valuable materials. The introduction of audio-visuals in teaching brought in wax cylinder and shellac discs in libraries. Magnetic tapes and discs as compact storage devices were followed by optical media in the form of tapes and discs.

Each material has its own span of life and its chemical components. Deterioration in the material occurs due to change in its chemical composition. The causes of change may be inherent in the nature of the chemical components of the base material or may be catalysed by certain external factors.

8.3.1   Internal or Inherent Causes of Deterioration

Internal causes in fact exist in structure of the material concerned and work from within to lead to deterioration or disappearance of the recorded information.

Paper-based materials

Deterioration of the paper-based materials in the library collection, as a major problem, became a matter of concern for librarians in the middle of the 20th century. It was more serious in case of books published between mid 19th century and early 20th century. The reason as had been revealed by John Barrow was the structure of the wood pulp based paper. The strength of the paper depends on: a) length of the individual fiber, b) strength of bonding of fibers, and c) the process through which pulp is made. Wood pulp contains most of the chemical ingredients of the wood such as lignin which contain acid. Similarly resin used in sizing of the paper also contains acid salt. In order to obtain gluing effect aluminum sulphate was used. Papers manufactured from wood pulps are therefore acidic in nature. When they come into contact with high temperature and humidity two main types of deterioration, namely hydrolysis and oxidation, set in, leading to deterioration of paper. Hydrolysis takes place because of the presence of alum, an acidic material. Oxidation takes place from presence of small particles of metals that creeps in from paper making equipments during paper making.

Ink

Ink used in printing from early 19th century began to be made of iron gall which contained ferrous sulphate. Through oxidation it forms sulphuric acid. Ink together with paper's acidity leads to loss of text from the paper.

Leather

It has been found that leather used in binding after 1830 lacked protective salt earlier available in leather. This was due to change in method of tanning under pressure for more leather by the binders. Such leathers become dry over a period of time and begin to break up.

Photographs and Films

"As the production of photographs has many different chemical processes in the capture of the image, photographs, also have a wide variety of aging properties. Some materials were made of extremely self destructive components". Cellulose nitrate films emit nitrous gases .The gases are not only oxidative but also toxic and explosive. In a self destructive process the film base and emulsion are eventually destroyed. It is inflammable at a fairly low temperature. Cellulose acetate films emit acetic acid vapor that acts to accelerate the rate of decay of the films. Motion picture films in rolls if in containers and lack ventilation have a tendency of self igniting.

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check you answer with the answers given at the end of this Unit.

4) Explain why paper in old books deteriorates.

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8.3.2 External Causes of Deterioration

External causes have been categorised quite differently by experts. The following are however some common causes:

- Light, Temperature and Humidity,

- Environmental Pollutants and Dust,

- Biological agents and Disaster.

Ross Harvey adds human being cause as a cause/ important factors to the external causes. IFLA, has included magnetic stray field, Fire, water and theft and vandalism to the list due to increasing share in recent years, of non- book materials in library collection and human cause and other disasters are discussed under the heading mechanical forces.

R.S. Singh has categorised external causes under the following four groups:

- Physical agents: light, moisture, heat and particles

- Chemical agents: acidity, gaseous pollutants

- Biological agents: bacteria, fungi, insects, rodents

- Accidental agents: flood, fire, etc.

Ranganathan has identified fire, water, vermin and human beings as the four enemies of library. Increasing use of technologies such as AC, facilities for photocopying and microfilming added some additional external factors for deterioration of library collection. The nature of the internal causes of deterioration is such that it can be only slowed down but cannot be reversed. But the deterioration or destruction due to external causes can be checked if precaution against the probable cause is taken in anticipation of their occurrence or if the cause is removed.

Light

Light causes deterioration in three ways—through intensity, through exposure of the material under light for longer hours in a day and through longer period over a year. The two extremes of the light spectrum carry ultra violet and infra red radiation. Both are known to be as deteriorating agents for library materials. The ultra violet radiation from light causes photochemical deterioration in library materials. The infrared radiation heats up environment causing reduction in

humidity and dryness in the materials. Light speeds up rate of oxidation in paper. It may also bleach paper and ink and cause fading of images. Light makes paper containing lignin dark. It may affect dye layers used in recordable and erasable discs.

Temperature and Relative Humidity (RH)

Temperature and relative humidity are linked parameters. Both play major role in preservation. Simultaneous fluctuation in the two parameters is very harmful for the life of the library materials. Being organic in nature, materials expand and contract as moisture levels changes. But compared to fluctuation in temperature, fluctuation in relative humidity has a much greater impact on collection. Excessive humidity leads to proliferation of fungus in all organic, mechanical and magnetic carriers. Low humidity level leads to dehydration in library materials and makes them brittle and in case of films emulsion may fall of the supporting base. Control of RH is even more important in libraries and archives with photographic materials. Too high RH makes emulsion sticky, glass may turn foggy, and photograph on metal base may begin to corrode. High temperature accelerates deterioration process in all kinds of library materials. The resultant dryness leads to evaporation of humidity, making environment dry, which makes paper, leather and some plastic-based materials brittle. High temperature also speeds up chemical reaction in all library materials including nitrate films, cellulose acetate films and colour films. It also leads to dimensional change in magnetic carriers and affects optical carriers, eats up pigment layers of magnetic tape and floppy discs.

Biological Agents

Biological agents include mould, insects and rodent. Mould weakens and stains paper, and obliterates images. Insects like cockroaches, silverfish, termite and beetles cause damage to library materials all over the world. Rodents make their nest in books and harm library collection by shredding pages of books. The damage caused by insects and rodents are irreparable. Mould and fungi obstruct reading of optical information, eat up pigment layers of magnetic tapes and floppy discs. The damage through these agents remains unnoticed till it reaches such a level that it becomes beyond any corrective measure.

Air Pollutants

Air pollutants also called environmental pollutants in the form of gases, like sulphur dioxide or nitrous oxide and ozone, emitted from factories or motor vehicles cause deterioration through acid attack or oxidation. Solid pollutants like dust dirt and sand particles are abrasive in nature and are also source of growth of biological agents. They also help acid formation in materials. In case of mechanical carriers, dirt and dust may lead to deviation of pickup stylus from its proper path causing audible cracks. Through the process of aberration they attack the integrity of the carriers. Magnetic tapes and discs are affected by dust particles as they may prevent intimate contact for replay heads to media. It may also cause head crash to computer hard discs. Dust prevents proper reading of recorded information on optical carriers.

Human Causes

Human beings cause damage and deterioration through various acts of omission and commission. Library materials are damaged both by library staff and user

community. The impact can be seen under the following broad heads:

* Negligence and lack of respect for the material
* Theft
* Vandalism

Staff Negligence

Staff negligence can be identified at various stages: a) at the stage of planning building such as lack of provision against effects of ultraviolet and infrared radiation; b) in maintenance of building and equipments such as overlooking regular cleaning and dusting in stack areas; c) maintaining poor security system for library assets, awarding binding job to substandard firms; d) organising environmental system with an eye for comfort of readers rather than protection of life of the library materials. Carelessness in shelving and moving of materials, etc. sometimes inflict very heavy damage to the library materials.

Negligence by User Community

Developments in printing technology have created a situation of plenty in availability of books and the respect for books has gone down in the same proportion. Paper editions have created an attitude of "read and throw" among the readers. As a result, underlining, tearing out pages and chapters, using books as pillow, putting it on window sills are some common practices among the users. Repeated exposure of books to ultraviolet radiation in photo copying, defacing illustrations and their mutilation are some other examples of damage perpetrated by the user community.

According to UNESCO existence of an attitude of negligence in staff is mostly due to lack of training in preservation techniques and lack of understanding of consequences of negligence. The need for training has become more important in view of ever growing importance of machine readable material and increasing use of technology in libraries in recent years. The training should be organised on an ongoing basis. Users should also be educated through signage and posters and by holding occasional exhibitions of damaged materials.

Theft and Vandalism

Library collection suffers irreparable loss through theft specially theft of rare materials. Thieves generally take advantage of carelessness of staff. Often they befriend staff to gain access to restricted areas and wait for suitable opportunity to strike. The New York Public Library caught a woman in Brooklyn who had kept 800 books of the Library. The greatest thief of library books, Stephen Bloomberg is said to have stolen 22000 books from 327 libraries.

Vandalism includes damage to library building as well as its collection during wars or due to mob fury on the so called ideological grounds. In many cases it has been found to be a case of simple deviant behaviour.

Magnetic stray fields

"Stray magnetic fields are the natural enemy of magnetically recoded information. Sources of such dangerous fields are dynamic microphones, loud-speakers and head sets. Also magnets used for magnetic notice board, etc. possess magnetic fields of dangerous magnitudes".

These are natural enemy of magnetically recorded information and must be kept away from magnetic optical discs. The safe magnetic field for analogue audio recordings is AC Field 400 amp. Per mt. and DC 2000 amp. Per mt.

Mechanical Deformation

Mechanical deformation takes place in mechanical and magnetic carriers due to mishandling of replay equipments. In case of mechanical carriers it results into scratches and distortion in groves while magnetic carriers suffer severe deficiencies in play back process.

Disasters

A disaster, natural or man-made, is an unexpected event which puts library collection at risk. Its damaging impacts are through fire or water flooding. In both cases books either burnout or become wet and, unless rescued immediately, become unusable. The loss from disaster is not confined to only books. A major disaster like wind or rain storm, earthquake or tsunami play havoc with buildings may cause flooding the building or result into major fire and even loss of human life. Few libraries have thought of disaster management policy or have developed disaster retardant plan. Such plan includes resistant measures in the building at the planning stage as well as taking such precautionary steps as ensuring safety of rare materials, provision of fire extinguishers and water sprinklers and sump pump in basement. The library should have a telephone tree, i.e. list of important phone numbers for contacting fire office, police and insurance agency and firms supplying materials required to meet emergency situation. Unit 9 deals with disaster management in greater details.

The library must have a permanent programme of disaster management. This will include regular inspection of risk areas i.e. roof, gutters etc. for possible clogging; fire extinguisher system and air conditioning plant, etc. should be professionally maintained. The library also must have an emergency plan to ensure that in case of disaster the essential human expertise and materials for rescuing documents are available.

Security Systems

Building design must incorporate all the various provisions for security of the library assets and collection. Rear windows should be fortified with iron bars. Entry and exit points should have efficient and vigilant security staff. Monitoring of reading rooms, especially rooms for rare materials should be done on an ongoing basis. Library should have enough lighting arrangements. All Keys should be with authorised persons only.

Self Check Exercise

Note: i)   Write your answers in the space given below.

ii)   Check your answers with the answers given at end of this Unit.

5)   Explain how temperature and relative humidity affect library material.

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6) Explain what you understand by staff negligence.

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8.3.3 Common Causes of Loss of Digital Data

Digital preservation to prevent digital decay is yet most spiritedly debated issue. Apart from physical deterioration, obsolescence of hardware, software and storage medium and failure to save crucial format information may cause digital decay and loss of entire content of a digital document. Generally, digital data are much less 'self-archiving' than print documents, and often they require more human efforts to describe and to provide context for interpretation.

Accidental Erasure

Loss of data occurs when a file is accidentally closed without saving it or when we write over the file while we are thinking that we are saving it. It may also happen when one is in the process of changing a file and there is a sudden rise in power supply.

Virus and Worms

Worms and virus may invade computer via e-mail, diskettes, CD when one opens attachment with the mail. If a virus reaches a programme file the programme fails to function properly. Worms corrupt hard drive by copying their file over and over again leaving no space on hard drive.

Power Failure

Loss of data is also possible if there is a sudden power failure and no UPS or battery support is available for computers.

Software Life

No matter how new is your computer system the software becomes obsolete within eighteen months to three years therefore one must back up data on regular basis and keep the system and software application discs stored somewhere accessible. Sometimes hardware's compatible to the software are not available which makes data inaccessible. The BBC created digital data on life in Britain in1986 to commemorate 900 years of creation of Doomsday Book by William the Conqueror but now it cannot be accessed because the relevant hardware is not available. In addition, the tapes of 1975 Viking launch mission to Mars, and Space shuttle's obsolete software and storage media are some of the examples where digital preservation was found to be fragile. Digital data preservation is largely experimental and replete with the risks associated and untested methods.

8.4   PREVENTIVE PRESERVATION

We have already discussed the factors responsible for deterioration in the previous unit. Here, we shall describe some preventive measures to be adopted for protecting the material from the deteriorating effects of each factor. The aim of preservation is to keep the information resources as close to its original condition as possible, and where it is not possible to transfer them to new format to prolong their accessibility. "The ideal environment" for preservation " of collection is the one where the temperature and relative humidity are controlled, which is free from pollutants, which has good ventilation, where light is controlled, which is free from mould, insects, and rodents, magnetic stray fields and where good maintenance and security practices are applied".

Light

To protect library materials from the infrared radiation of direct light, windows should be fitted with sun blinds, shutters, films or should be fitted with special kind of glass available for this purpose. Fluorescent tubes should be fitted with organic filters or with sleeves. Documents should be kept away from heat sources emitting infra red radiation. Light intensity for fragile graphic materials should not exceed 50 lux.

For materials on display in show cases light should be 50 lux for 8 hours and must not exceed three months in a year. Heritage materials should be divided into categories of sensitivity to light and relative humidity and their total hours of exposure should be as per international standard. Reduction of infrared radiation from a) natural light area should be achieved through additional equipments (shutter blinds, films, fitting of special type glass, b) In artificial light area should be achieved by keeping documents away from light sources, use of organic filters for fluorescent lamps and mineral filters for halogen or metallic halide lamps.

Temperature and Relative Humidity

The ideal level of temperature and RH for most of the library materials are:

Temperature	18 Cº	± 2 Cº
Relative Humidity	50%	± 5%

Each of 10Cº decrease in temperature shall double the life of the materials. High or frequent change in temperature in environmental condition should be avoided as they will damage library materials. Relative Humidity should be stable. Fresh air movement or environmental control devices can reduce pockets of high relative humidity. Photographic collection should be divided into active and passive collection and passive collection, consisting of the originals should be kept at low temperature and low RH.

Atmospheric Pollutants

The library should provide for air cleaning in stack areas. Ongoing arrangement for effective cleaning and dusting of the whole library will ensure minimum deterioration caused by dust particles. Vacuum cleaner should be used only if it is fitted with absolute filters. Solid particles also can be checked by filtering the air coming from outside. Air ducts should be regularly cleaned to avoid dust or soot built up.

Biological Agents

The most effective way to keep the biological agents at bay is to maintain temperature and relative humidity at the recommended level. Regular cleaning of the library and its surroundings, free flow of fresh air will further improve the situation. Organic packaging materials of mechanical or magnetic carriers, and food items should not be permitted in the library. Water leakage of drainage pipes should be checked as they help develop dampness. Rodents should be controlled through regular inspection of the building for their nest and by using mouse trap. Use of insecticides are said to have temporary effect. Use of thymol and similar chemicals are now banned in most of the countries. According to Ross Harvey current practice is to avoid chemical controls wherever possible. Instead, reliance is placed on a programme of integrated pest management which incorporates environmental control, the use of freezing of affected materials and ongoing inspection and monitoring to detect the presence of pests and harmful environmental conditions.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with the answers given at the end of this Unit.

7)   Explain what you understand by preventive preservation. What precautions are required against biological agents?

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Maintenance

Regular check up of building will include checking of drainage pipes, roof, electric fittings, etc. for their proper functioning and for carrying out required repair for fault. Regular collection checking will help spotting items for binding or repair or for transferring to rare collection. Equipments need checking lest they may result into some major accident. Inspection of emergency plan for the library at regular interval is also important part of maintenance work. Physical maintenance including preventive preservation is discussed in detail in the subsequent section of this unit.

Preventive Preservation; Special Category Documents

Photographs

Photographs should be kept in envelop or box which are free from lignin and oxidative residual chemicals. The collection may be divided into active and passive collection, active being the surrogate. The passive collection comprising the originals is kept at very low temperature. The active collection comprising surrogates should be available for general use.

Mechanical Carriers

Phonograph cylinders and shellac discs should be handled only by specialist personnel to keep their groves undistorted. It must be protected from careless handling of replay equipment.

Magnetic Tapes

These are often damaged in replaying and therefore, replaying equipment should be maintained professionally to ensure against malfunctioning. Magnetic tapes should be protected from dust to ensure contact of replay heads to the media.

Optical Carriers

These include CD ROM, CD-I and CD-V, Optical Discs, Tapes and DVD. These are affected by high and low temperature and humidity. CDs must be handled with utmost care keeping in mind their mechanical integrity, and kept in special storage cartridges. In case of some carriers light may affect the dye layers used in recordable and erasable discs. Dust and dirt prevent the proper reading of the recorded information.

Electronic Publications

These are both off-line as well as online. Off-line are subject to the same influence from deteriorating factors as other magnetic carriers. In case of on-line databases the real problem is that of acquisition, selection, storage and access and not of preservation. However two preservation methods have been suggested:

Technology preservation strategy i.e. preservation of the original software and possibly hardware.

Digital migration strategy i.e. re-encoding digital information in new format before the old becomes obsolete.

Self Check Exercise

Note: i) Write your answer in the space given below.

　　　 ii) Check your answer with the answers given at the end of this Unit.

8) Explain preventive measures for special category materials.

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8.5 PHYSICAL MAINTENANCE, REPAIR AND BINDING

Library materials are both artifacts and intellectual content. Preservation of library materials deals with both aspects of the materials. But the two aspects are not always of equal value. Often a situation arises when the decision about the preservation has to overlook protecting the body of a badly damaged document

and in order to protect the text it needs reformatting in a microfilm or in digital form. Similarly sometimes a document is more important as an artifact and has to be protected in its existing form overlooking value of its intellectual content. Many books illustrated during the Mughal period are valued and deserve preservation not as much for the text as for the miniature paintings, or for binding art or for their calligraphy styles by a master calligraphers. An important part of the total preservation work is to pay attention to "those aspects of in-house physical maintenance and repair that prevent needless deterioration and return damaged items to useable condition". However these aspects are, broadly speaking concerned only with preservation of artifacts and here too mostly the paper-based materials, more specifically the books. According to Ross Harvey the preservation work falls under two types of activities; a) refurbishing and collection maintenance, and b) binding.

Refurbishing and Collection maintenance

Refurbishing refers to carrying out thorough cleaning of each material in each shelf of each almirah. The cleaning operation should also cover the surroundings, the equipments and furniture. The process may reveal need for replacement of certain equipment or even repair. It may also help to upgrade the storage facilities for the books, adoption of better quality equipment such as humidifier, dehumidifier. Refurbishing is a sure way of identifying books which need only repair or full binding. The process helps to become aware of need for transfer of some more books to rare collection. Refurbishing is carried out with gap of few years.

On-Going Collection maintenance

The on-going collection maintenance activities are the same as that of refurbishing with the difference that a) these are yearlong activities, and b) the emphasis is on regular cleaning, tidying up of books and making them upright. The idea is to have every item in the collection examined at least once in two years.

Repair

Repair work involves preliminary examination of items to decide about the repair needs. The actual work of repair begins with first, cleaning of the materials and then patching torn areas with strong acid free paper. The paper used should be as near transparent as possible. The Japanese papers are more suitable for repair work. The adhesive used should be good archival type adhesive.

8.5.1 Preservation of Intellectual Content

An essential component of preservation is the reformatting the intellectual content of a material or a group of materials. Reformatting is transferring the text of the material in new form in which it is accessible for future use. It is usually done to make accessible the contents of a material which due to deterioration in its physical form is now beyond repair and restoration. However, sometimes reformatting of a material or a whole group of materials is also done due to original being too valuable and rare that it is likely to be damaged if made available as a matter of routine. Yet another situation when reformatting is done is the one in which the reformatted text is made to keep it as a safe copy to be available if somehow or other the original lost in a disaster or due to some other accidental factor. In brief the "four main reasons for reformatting are: physical condition of the material;

how heavily it is used; its rarity; and its economic, aesthetic, historical or other value".

Reformatting can be done in any one or more of the three forms: a photocopy; a microfilm; and in a digital form. Microfilm is preferred over the other two as it is easy to store, is considered more durable and unlike digital material does not need relevant hardware/software for use. But reformatting being an expensive process complete bibliographic record of the material reformatted must be maintained to avoid repetition of the process for a material already processed.

8.5.2 Binding

Binding of Library materials is an integral part of the preservation of collection. Resources acquired by library need proper care to keep them useable for long period. Materials of certain categories are such that they need binding even before they are to be put in shelf for the users. Small pamphlets and paperback edition of text books are some examples. There are other resources which are received by library and if left unbound certain parts may disappear leaving the same incomplete. Major binding work in libraries is concerned with binding of books although periodicals are also bound when a volume is complete. A large number of books demands binding due to heavy use which results into deterioration of original binding. Very often carelessness in handling by staff and/ or users also results into disintegration of section and pages of the materials creating need for its binding. Binding is developed from a craft into a fine art. Many old books are specimen of binding art. But we are not going to study binding done as a piece of art.

Objectives of Binding

The following are some of the objectives for binding:

- To avoid damages to materials from mishandling.

- To safeguard materials against wear and tear of use.

- To avoid shabby looking face of materials.

- To preserve perishable and frail materials.

- To make materials attractive for the users.

a) **Styles of Binding**

   The various styles of binding include Case binding, Library style, Flexible Style, The Sunk cord Style, Limp Binding, Loose-Leaf and Guard Books. Case binding is normally done by publishers. The text is sewn separately and when ready it is put is a Case of Cardboard covered with cloth. In library style the Card board is of split kind and is fastened in the text unit with tape inserted in between the split board. Flexible style is used for books that need fine binding. It involves exceptional technique in sewing, cutting and covering. It displays raised lining on spine numbering five, seven or nine. The style was popular till early Twentieth Century. The Sunk cord style required groves cut in the spine to sink cord so that they are not projected above the spine. This makes binding extremely elegant. Spine and cover are decorated with gold impressions from finely cut tools. But the styles are week for ordinary handing. Limp binding refers to books bound with vellum wrappers without hard covers, vellum extending beyond the normal squares

enclosing the foredge completely. Many devotional books, especially the Bible, are still bound in this style.

b) **Kind of Binding**

Libraries generally use library style for library materials. These are done in various kinds such as full leather, half leather, full cloth, half cloth and board binding. The library style which is a preferred style in libraries is not an elegant style, but it fulfills its purpose of withstanding heavy and constant use. Each type is selected as per quality of book and its preservation need. While the sewing method of leather and cloth categories is the same it is the covering materials which changes. Leather and half binding are more durable and are preferred for expensive books needing preservation for longer periods and also for reference books which are in heavy use, such as dictionaries, encyclopaedias and bibliographies. Cloth binding is less durable and is preferred for books likely to be available after some time in new edition. Coffee table books also normally get full leather binding. Pamphlets, being of small number of pages, are given board biding. Libraries prefer quality biding for their books. Library quality binding is also called reinforced binding. The Joint Committee of American Library Association and the Library Binding Institute have recommended details of reinforced binding quality. Dr. Ranganathan has also recommended reinforced binding as biding for library books. Normally heavily used books, such as text books and books of fiction deserve frequent binding.

The expenditure on binding is a heavy charge on library budget. Libraries have therefore developed certain criteria as guiding principle for selecting books in need of binding. The following are some criteria that help in selecting books for binding and deciding about the kind of binding that should be given to each material:

• Kind of the book— rare, manuscript, fiction or non fiction,

• Present value of the book,

• Future value of the book,

• Possibility of new edition becoming available, and

• The existing physical condition of the material to bound.

Based on the above criteria some books such as paperback edition or periodical volumes are released for circulation only after they are bound.

Reinforced Binding Process

The work of binding is divided in two parts, forwarding and finishing. Forwarding covers the operations required to complete the binding and finishing is embellishing it with a title and decoration.

Collation: Books received for binding should be first collated for completeness of the pages and their being in correct sequence. Before starting binding, all worn out, soil, torn and damaged pages should be carefully restored with Japanese tissue paper.

Sewing: Sewing should be done one sheet on. Linen and threads used should be unbleached separate leaves, plates, etc., should be first mounted on guard of linen and sewed like a section.

End papers: End papers used should be good tough opaque paper of approved mild colour.

Cutting Edges: Edges should be cut accurately leaving margin.

Forwarding: Unless otherwise advised all books should have French joint and tight or close flexible backs with the covering material attached directly to the back. Tapes are to be firmly inserted between split boards.

Lettering: Lettering also called finishing is to be impressed in best gold directly on to the materials which cover the book.

c) **Materials (Consumables) for Binding**

Binding craft requires use of various materials. Some of these have only one use while others are needed at different stages. Being organic in origin, these are affected by environmental condition. The binder must be aware of their acidity value before selecting an item for use. The acidity or alkalinity is measured on pHscale has a range of 0 to 14. The following are some materials which have major role in binding work.

Adhesive

Adhesive is a material which is used in almost every stage of forwarding. Many factors that are involved in its selection include durability, water content pHvalue, power of penetration and adhesive properties. No adhesive will satisfy all binding operation. Paste of root and cereal origin is a stronger adhesive. Organic gelatin and flexible glue are also used. From the middle of the last century synthetic glues have become more favorite with binders. However these should be avoided in fine, old and valuable books because of the difficulty of repair work in future.

Board

Board serves the need for guarding the text from the two sides of a book. Board quality is determined by the thickness or its weight. Various types of boards are available. The following are some often used boards:

• Mill board, Strawboard, split board and pasteboard.

• Millboard is very strong and durable. It is capable of bending without cracking and has satisfactory pHvalue. Millboard is used in all leather binding.

• Strawboard is manufactured from straw, sand and lime. Because of lime content it resists industrial atmosphere. It is used in case binding of low priced books.

• Split board is made of millboard and straw board. Straw board is on the inner side and mill board is on the outer side. Split boards are used for library reinforced binding. The slit is used to insert tapes after which the two are firmly glued.

• Paste board is manufactured from chemical wood pulp, esparto grass and other fibers according to quality. Usually it consists of laminated layer of thin white board or it may have a core of poor fiber lined on both sides with good paper. It is used chiefly for mounting.

Cloth

Mull is an open weave cotton material stiffened with size. It is used to reinforce any material to which it is attached by an adhesive. It is used extensively for strengthening the spine of book and reinforcing maps and documents. Buckram a closely woven linen of cotton cloth and is used as cover for good quality binding. Rexine or leather cloth is now used as cover for children books.

Leather

Quality of leather is very important for the durability as well as beauty of binding. Leather used in binding are known by the name morocco, pig skin, Vellum and parchment. Morocco is a general name given to goatskin. It is the most popular leather fort quality binding work. Printing Industry Research Association, US, has developed standard for suitable leather. Standard quality leather carries stamp of PIRA to assure that in its preparation no injurious chemical has been used. Calf skin is used for its delicacy and beautiful finish but it is not as durable as morocco. Pig skin is considered strong leather and has been in use for centuries. Vellum and parchment are made from goat and calf skin. Its life is very long but it is easily affected by climatic changes. Vellum binding are beautiful, but Vellum is a little transparent and to subdue transparency it is lined with handmade paper.

Paper

Paper has been called the basis of the craft of binding. Decorative paper is used for the sides and end papers of books. Japanese papers are used extensively for repairing damaged papers or mending and replacing torn or missing parts of leaves. Paper used for binding should have a minimum pHvalue of 5.5 for the binding to be sound and lasting.

Thread

Linen thread which is made from flax fiber is much stronger than cotton thread and is preferred for reinforced binding. Now a day's synthetic thread are much in vogue. They can stand environmental variations better than linen or cotton.

Binding of periodicals need special attention in collation. In fact there is a view point that periodicals should not be bound. The arguments to support this view include delay that it causes to scholars in their research work; bound volumes deprive other readers from reading articles in some other issues of the volumes; create problems in getting photocopy of articles. It is suggested that secondary types of binding such as wrapping in a bundle and putting in boxes may provide safety and ease of use. But such binding suffers from the dangers of losing issues. Before taking up binding, presence of all the issue must be ensured. Superfluous pages containing advertisements should be removed. Title pages and content pages should be placed at the beginning and index pages at the end. The binding should be such that the pages of the volumes can easily lie flat for photocopying.

Binding is a time consuming process and calls for maintaining accurate record at the circulation counter for regular reference. The file contacting the list of books arranged author-wise and book card arranged in classified order should be carefully maintained. Once the bound volumes are received from the binder each individual book/ volume is checked for the quality and correctness of style and for completeness of the text. Before sending the materials for shelving, pasting of due date slip, library label and book pocket is carried out and the relevant

book cards are placed in the respective books. Some libraries maintain a register for keeping a permanent record of materials sent for binding to satisfy the audit requirement.

Self Check Exercise

Note: i)   Write your answers in the space given below.

      ii)   Check your answers with the answers given at the end of this Unit.

9)   Write the considerations that determine need for binding a book.

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10) Describe why some people do not favour binding for periodicals.

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11) Describe the various style of binding.

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Binding library materials is an integral part of the library's preservation programme. Constant use of books and journals results into wear and tear of the materials. If not bound in time it may result into total loss to the library. Binding is, however, an expensive function and materials for binding should be identified with much care. There are certain considerations which help in this work. There are a number of binding styles developed over a period of time. The one preferred in libraries is called library style. Binding of periodicals requires special attention. Collation in binding work is an important function.

8.5.3   Maintenance of Collection

Maintenance of collection is an important function in collection management of library. In the absence of maintenance any arrangement of the materials shall collapse and the collection will not only become inaccessible but even deteriorate. Maintenance of collection involves two actions. At first the collection has to be

grouped according to certain characteristics in the documents. It is called arrangement by sequence. Next it is arranged in each broad group, in a systematic order based on certain scheme developed for classification of knowledge. It is called shelf arrangement. The arrangement has to simple in operation and efficient in providing access to the desired document. Without organisation the mere richness of collection has no meaning for the user community. A rational organisation in collection is the sine qua non of an efficient library service. The next function of maintenance is making provision for the sustenance and preservation of the collection.

Arrangement of Material in Sequence

Information materials in libraries are varied in subject as well as in their physical form and format and hence they can be arranged according to their varied internal and external characteristics. In other words, these characteristics play an important role in arranging materials in sequence.

Internal Characteristics

a) **Nature of contents**

   While most of the library materials are for sustained reading, there are some documents which are used only for looking up a certain formula, a data, a brief write up, an event, a person, etc. Such documents are put in one sequence called Reference Sequence. Library also acquires materials which are written as essential and recommended reading in a course study for students preparing for examination. These books are placed in separate sequence called Text Book Sequence.

b) **Level of Content**

   Books meant for readers of a certain age group or for those belonging to a special category of readers, such children or adult, are grouped under Children Books Sequence or Adult Learners Sequence.

External Characteristics

a) **Size**

   Though library shelves, of fixed type unit racks, are made to accommodate books of normal size, ie. 5.5"× 8.75", books in libraries come in a variety of dimensions ranging from very small books to some of a very large dimension. If small size books are accommodated in these shelves it will amount to wastage of shelf space. Large size books cannot be accommodated in these shelves. To solve this problem libraries create two sequences called Under Size Sequence and Over Size Sequence.

b) **Infrastructure needs**

   Non book materials, which include microfilms, microfiche, tapes, Braille books, CDs, DVDs etc., need some sort of equipment for their use in libraries. These are therefore, kept in a sequence which may be called Non-book Material Sequence.

c) **Security Needs**

   Manuscripts, personal papers of eminent personalities, autographed classics, are always kept in closed stacks. Access to such materials is provided under

vigilance. It may be called Special Sequence or Closed Sequence. Materials which are available for open browsing and borrowing are arranged in Open Sequence.

In addition to the above sequences, libraries often collect together materials from various sequences to build up a **Temporary Sequence** on the occasion of certain events such as a thematic conference in the campus, a major social or political event, or celebration of a centenary of an eminent personality. Sometimes an iconic figure like Mahatma Gandhi and Nelson Mandela can be the theme and libraries may go for **Permanent Sequence**. Dr. Ranganthan has given examples of GANDHIANA and NEHRUANA.

Arrangement on shelves

After the decision about placing the materials into such broad broken, the library has to arrange the books on the shelves under each sequence. It is called shelf arrangement. Traditionally one of the three types of arrangements is followed in libraries:

i) **Classified Arrangement, based on one or other standard schemes of classifications**

Classified arrangement is widely used throughout the world. Adoption of classified arrangement is very helpful in meeting the user need to browse and select material on topics of their interest. The system satisfies the needs of readers looking for specific books and also of those who are looking for literature on an area of their interest.

ii) **Alphabetically by author or title of the books**

Alphabetical arrangement, whether by author or by title, is simple to operate and it does not involve problem of fixing order as is required in classified system. But this system is more helpful in a small library or in a library where authors are the subject of study such as the Sahithya Academy Library.

iii) **Serial number as per accession register (Accession number)**

Arrangement by serial (accession) number is practical in library with a few hundred books like private circulating library where an unqualified person has to look after the library single-handedly. Sometimes even large libraries arrange fiction in alphabetical order in an independent almirah amidst racks where other books are arranged in classified order. Such arrangements are called Broken Order Arrangement.

Once the division in groups, i.e. sequence making and shelf arrangement in each group has been accomplished, the next job is to provide for maintaining or sustaining the order of arrangements and for preservation of the collection from, both internal and external damaging agents. From preservation perspective, the job of maintenance assumes more importance in libraries.

Shelving though mainly concerned with restoring order in the shelf through replacement of books received from circulation and from technical section, also contributes to the conservation and preservation of library materials. The duties of the shelving unit include shelving, shelf rectification and refurbishing.

Shelving

The aim of shelving is to put back books earlier removed from a shelf for reading or borrowing, to their assigned place. Broadly speaking the routines of shelving include cleaning and dusting of books, moving over books in the shelves create space for new addition in the same subject area. The shelving staff should:

• Strengthen the shelves constantly,

• Keep all books in a straight line by pushing books backward and forward,

• Keep the spines of books parallel to the front borderline of each shelf,

• Eliminate "lean" by pushing the loosely shelved books from the right to the left,

• Leave 20% space in each shelf empty,

• Use book support for partly filled shelf.

The shelving staff is expected to regularly dust the shelves and clean the books before putting them back in shelves. Daily dusting part of the shelves contributes to the preservation of collection.

Shelf Rectification

Shelf rectification of stack area is done to ensure that materials remain in their assigned place and they are in good shape is of paramount importance in open access system. It is carried out at fixed intervals. It includes the following routines:

i) Maintenance of correct order in shelf,

ii) Ensuring presence of book card, due date slip, book tag in their place and in good shape, and replacement of the missing ones,

iii) Identifying titles severely damaged for replacement,

iv) Identifying titles in need of minor repairs.

Refurbishing of Stacks

Refurbishing refers to organising through cleaning of the entire stacks. "An active and well organised refurbishing programme is a vital maintenance activity in library". The work is carried out once in a year. However, it can also be organised as a routine by selected by choosing part of the stack area for a week or month. In selected areas all books are removed from the shelves. Each book is replaced after cleaning. Damaged books are removed and separated in to more damaged books needing professional conservation. These are assigned to the professional conservators. Books which can be repaired locally are repaired and put back in the shelves.

Self Check Exercise

Note: i) Write your answers in the space given below.

ii) Check your answers with the answers given at the end of this Unit.

12) List internal and external characteristics for sequence determination in book stack.

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13) Explain the formation of Temporary Sequence of book stack.

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14) Describe the duties of shelving staff.

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8.6 STOCK VERIFICATION

Stock taking or stock verification is the physical check up of the total collection at regular, mostly annual interval. During stock verification, borrowers are required to return books they have borrowed; libraries are closed to the user community. Books are verified with the help of accession register. On completion of checking list of missing books is prepared and placed before the authorities for writing off of lost material. In school and small college libraries, librarians are often made to accountable for the loss and in some cases even made to pay for the lost books.

The concept of stock verification might have its origin when books were scare and were to be strictly guarded for their safety. Librarian was supposed to be more a custodian of the stock than a facilitator in providing access to users to their desired information. A system of counting the number of volumes at regular interval was in place to ensure that all the copies were in place. The attitude was understandable in the period when books were hand written and papers were yet to be made by machine. Even after the printing was invented books were printed page by page. With the advent of printing press and paper made by machine, the scarcity gave place to plenty. But the change in attitude takes time. The tradition of annual stocktaking persisted till the recent years when countries in the west replaced it with evaluation of collection. The accreditation bodies are not interested in numbers of book added or number of volumes issued. Now they ask libraries to show evidence of difference that collection has made to the service and "has help meet the institutional mission and goals". It is held that a properly done survey gives library opportunity to see its strength, its weakness, the direction in which it has been developing and how well the collection is adapted to its clientele.

In India also various committees and commissions, both official as well as non-official, have spoken against the futility of stock verification and the injustice of holding librarian responsible for loss of books. But the attitude of authorities has

only partially changed as is evident from the circular dated Feb. 2, 1984 issued by the Department of Expenditure, Ministry of Finance. According to the circular "the position of the library books is different from that of other store". But the circular still insists for annual stock taking for libraries with collection up to 20000 books. Libraries with collection above 50000 are allowed taking verification every five years.

8.6.1 Advantages of Stock Verification

Stock verification helps in:

1) Identification of lost books in a library.

2) Opportunity to staff to get more acquaintance with library collection.

3) Identification of titles needing repair/replacement, etc.

4) Identification of titles fit for discarding.

5) Help rectification of record such as catalogue, shelf list regarding missing books.

6) Identification of titles in need of tag, due date slip, book card replacement.

7) Understanding effectiveness or otherwise of library security system.

8) Through dusting of shelves and cleaning of books.

8.6.2 Disadvantages of Stock Verification

1) Stock verification is a lengthy process, therefore, the library remains closed for a long period.

2) Patrons are required to returns books borrowed from the library.

3) Accumulation of work in acquisition, technical processing sections.

4) Despite the best possible security system, no library can claim zero of books.

5) Staff time is wasted in futile activity.

8.6.3 Methods of Stock Verification

Stock verification or checking of resources against the inventory of resources can be done in many ways. Some important methods of stock verification are discussed below.

i) **Stock Verification with Accession Register**

A team of two persons is constituted to carry verification. One Person reads the accession number loudly; the person holding the register locates the number and puts a tick mark on the number, preferably, with pencil. This process is carried out through all the stacks holding library collection. On completion of the round on the books in the stacks, similar checking is done with issue record at the circulation desk as well as with the list of books sent for binding. The next step is to prepare a list of tittles not ticked in the register. If the library has a policy of regular stock taking at a given interval, say one year or five years, the new list is tallied with the list of the immediately preceding year. Items which are in the previous list are struck off from the new list to get the final picture of loss.

The method of carried out with care is the most reliable and perfect. But in actual practice it suffers from many frailties:

- It is cumbersome and tiring as it calls for opening of pages back and forth each time a number is to be located.

- There are chances of accidentally putting tick mark on wrong number.

- Sometimes a book originally tick marked as missing is suddenly located but after it had been cancelled from the register. The only way is it re enter it at a new number.

ii) **Dummy of Accession Register**

To save the original accession register from getting shabby with cutting and marking stock verification is carried out with a dummy of the accession register. A plain register with serial numbers printed in columns on each page is used for stock verification. The team proceeds with register to the shelves and one person speaks accession number of the book and the other person tick marks the relevant number in the register. The whole process is repeated as explained above. Next all left out numbers are checked with the accession register to get the bibliographic details for the missing numbers.

The method saves the actual register from getting dirty but the chances of making wrong number still persist. But it is a time consuming method as the bibliographic details are to be added to know the missing books.

iii) **Stock Verification with Book Card**

The method needs formation of two teams to carry out the work. One team collects book cards from books and arranges them by serial order of the accession number on the cards. The second team tick marks the relevant accession number in the register and replaces the card in the books after they are re-arranged in classified order. The entire collection is verified and at the completion of checking the list of missing books is prepared from the accession register. The method leaves the register clean but the method is very cumbersome. Another way to conduct Verification is to prepare two book cards at the time of preparing a new book for circulation. Keep one set in a catalogue tray arranged in classified order. The cards may be of two different colours. At the checking time the spare cards kept in the tray may be put in the book pocket along with the original book card. The book cards left out in the catalogue tray on completion of checking will show the missing books in the collection. Both the above two methods are time consuming.

iv) **Numerical Counting Method**

The simplest method of stock verification is to count the total collection available in the library, add to it the books out on loan and with the binder together with books awaiting processing and compare the figures with the number of book in the accession register. The difference will be the number of missing books.

The method, however, does not identify the actual titles that are missing from the collection. It cannot be of help in replacing the missing books.

v) **Stock Verification with Shelf list/card**

Shelf list is an additional catalogue of collection which is arranged and kept inexact parallel way of books in the library, sequence wise as well as shelf wise. The work of stock verification is done by a team of two persons. One person tells the accession number and the other person shall raise the corresponding card in the tray. In this method more than one team can function simultaneously, each taking up one sequence for the checking work. On completion of the checking work a list of missing books shall be prepared with the help of cards which have remained in the tray unturned.

Stock verification with shelf list give more reliable figure of missing books. It also takes less time as no turning of pages or putting tick mark is required in the method and more than one team can carry out checking work.

vi) **Sample Stock Verification**

Sample stock verification is carried out to get an idea of the vigilance system of the library. One may choose one of those subject areas which are more prone to mischief such as fiction, art books or music score. Any one of the various methods of verification may be adopted for this purpose. If the result shows more than normal loss total verification may be taken up.

vii) **Stock Verification through Blank Slips**

Stock verification through blanks slip is very much like the verification with book card with the difference that instead of book card uniform size slips are used. Accession number of each book in the shelf, in issue record and other places are recorded on each slip. Slips are arranged in serial order of accession numbers. The arrangement reveals the missing accession numbers. The list of missing books can be prepared with help of accession register. However the system requires much alertness in collecting the slips and during their arrangement in serial order.

Pre-Condition for Stock Verification (by some methods are)

• Circulation Work is stopped and issue records are frozen in the existing condition.

• Entry of staff other than the verification team to the stack and issue record area is closed.

• The verification work is not done in broken stages.

Stock verification is supposed to be an annual activity of library to see if library collection has remained intact and if all the materials are in good condition. In the western countries stock verification has been replaced by stock evaluation. In our country it is used as a punitive action and has been used as weapon against librarians in school and even college libraries. There are some positive gains in conducting stock verification. But gains have to be weighed against cost in terms of man hour devoted to the work and loss of service. Among all the traditional methods, stock verification with shelf list appears to be the most efficient. Yet in modern days, most libraries conduct stock verification quickly and at low cost without much disturbance to service and without closing down the library using library management software and portable bar code readers attached to data storing devices.

Self Check Exercise

Note: i) Write your answers in the space given below.

   ii) Check your answers with the answers given at the end of this Unit.

15) Discuss the alternative to stock verification.

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16) Describe the disadvantages of stock verification.

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Precautionary measures against loss

Having carried out stock verification in a library, the very first question to be asked is that 'are the existing precautionary measures against loss of library documents enough? and is there any scope to take further precautions?' (This may even be one of the objectives of the stock verification). The preventive and precautionary actions normally cost much more than the value of loss. The usual precautions taken at the time of planning a library is to operate with one exit cum entrance, not allowing personal belongings inside the library and covering all windows of the building with suitable wire mesh or metal grills to avoid passing books through windows. Additional precautions like a check point at exit gate with a person and/or vigilance manpower including security guard, magnetised document checking/ burglar's alarm and other electronic book security system, CCTV, insurance against loss, etc. cost substantially to the organisation in addition to being not fool proof. What additional precautions are to be taken depends on how much additional expenditure (i.e., in addition to the cost of stock verification) the organisation is willing to incur. Here two things need special mention. Firstly some of the costs like salaries of vigilance/ checking staff are often invisible. Secondly, any physical check by a security guard in reputed institution may not only bring resistance from users but also makes an ugly show. Apart from intensifying vigilance, another positive approach propounded is to liberalise services like extended library hours during examination time, liberal or subsidised photocopying service and liberal lending of books marked 'not to be issued'.

It is natural to raise a question as to how library books are lost. Mysteriously, it becomes almost impossible to pin point at any individual or set of individuals. Nor it is easy to catch red-handedly such thieves. Where they are caught also, surprisingly the legal process is so fragile that it becomes difficult to establish a

theft. Any way librarian is not a police officer. While discussing various security methods Pierce (1980, 271-249) says "... maintaining the security of library materials has changed from a minor irritant to a major problem. Many libraries have discovered that they are losing more than one percent of their collections each year [and] vandalism, arson and wanton destruction have become more common in libraries and will probably continue and even possibly increase".

An analysis of types of books lost and the distribution of value of books lost as against the strength of collection and average cost of books acquired should provide some guidelines about type and nature of books lost the need for vigilance, the need for change in arrangement and organisation of collection.

Responsibility and write-off of loss

After accepting and probably implementing wherever possible the additional precautionary measures against loss of library documents the ordeal does not end. No precautionary measure without fully undermining the service function in an open access library can ensure total elimination of loss. A negligible number of perverted, possessive, habituated persons responsible for loss and mutilation are likely to continue in spite of liberalised services and strict vigilance. Further what has already been lost and what is going to be discovered as lost in the future stock verifications need to be explained to and got write-off by the competent authority. At this stage the question of who is responsible for loss of library documents often surfaces with an indirect hint at librarian or librarian together with his staff. In some libraries, the librarian may be directly held responsible for the loss.

Loss of moveable property, stores and consumable is a universal phenomenon. Individuals, institutions, departments, public and private enterprises incur loss of many types of moveable property, stores and consumables. An individual library user, who loses a book borrowed from the library pays the 'replacement cost' to the library, rightfully and sometimes vengefully feels that what is lost by librarian should be made good by librarian. But s/he conveniently forgets to distinguish librarian as individual user from librarian as a functional head of the library.

In no other area of loss like that of minor equipment and consumable in any organisation so much of fuss about responsibility of loss arises as it happens in case of loss of library documents. As such stock verification is covertly viewed as a tool to punish librarians. Librarian in the process of providing service to users antagonises those who loose documents borrowed in their names and earns a psychological dislike or hatred by recovering the 'replacement cost' of documents. It is extremely rare to see a situation in an organisation where recoveries are made for loss of minor equipment and consumables even though they are issued in the names of individuals for keeping in their exclusive possession.

Compared to the magnitude of losses in many types of stores items in an organisation, the loss of library documents is meager. Secondly the stores items including smaller equipments would have been kept under exclusive possession in lock and key and there may not be a need to share them with others. In fact, many times books issued to individual departments are also lost. Further all other types of items are subjected to strict security with gate passes. On the other

hand, documents in an open access library are meant for shared use by many. Library staff is not meant to keep custody of library documents alone. This comparison of the circumstances in which loss of library documents occur with that of stores items clearly shows that loss in libraries are inevitable. For argument sake, an anti-service attitude can be taken by a library and advocate for having security guarded closed access library with gate pass system. But it takes away the essence of library services. Results of stock verification should not be used to impose restrictions. In any organisation, if librarian and his colleagues have to take the full responsibility for the loss of documents and make good the loss from their salary, it is obvious that s/he and her/his colleagues who share the responsibility be given a 'risk allowance' on line with allowances given for jobs like that of cashier in offices in addition to providing freedom in amending the policies and procedures of library to minimise loss.

However, the more reasonable way of clearing the deadlock of responsibility is to treat the loss of library documents like any other loss in the organisation and the competent authority write-off the same unless the situation warrants an enquiry about negligence and dereliction of duty on the part of librarian and library staff. The rules governed by the institution would indicate the financial powers and limits for write-off and the extent of loss allowed. In case of Government of India institutions, librarian in the rank not below that of a Deputy Secretary to the Govt. of India or Head of the Department who has financial powers can write-off loss of library documents to the extent of financial powers and monitory limits. Further rare books and books of special nature may be kept under closed access. There is also a provision in the above rules that there should not be any objection to the disposing of mutilated/damaged/obsolete volumes to the best interest of the library as long as it is based on recommendations of a three member committee appointed by the Department.

8.7 WEEDING

The fifth law of library science (Library is a growing organism) is more visible in the area of library collection. Few libraries are in a position to keep on adding additional storage area to accommodate ever increasing collection. At the same time a good number of books become out dated in terms of subject matter and become a liability as well as drain on the resources of the library. Many books become worn out and unfit for use. Books printed on poor quality paper under unfavorable environmental condition become easy prey to all sorts of bacteria. Research in science and technology make most of the science and engineering books irrelevant in a short period. The same is true in case of most of ready reference books such as yearbooks directories, etc. Holding in the racks such books become a source of obstruction for books which have relevance for the present needs of users.

Definition

Removing books not needed for one reason or other, from collection of a library, is called weeding of books. Another term used for weeding is deselection. Weeding is also called relegation in some countries although in this case books are not discarded but transferred to a secondary storage area. Weeding has been defined as "the practice of discarding or transferring to storage, excess copies, rarely used books, and material no longer in use". It has also been defined as "removing

non collection from the primary collection area". Libraries have some policy of removing unwanted books from their collection. As for disposal of such books is concerned, Libraries have two alternatives before them: either transfer them to some secondary storage, if they have one, or discard them from the library.

8.7.1 Aims of Weeding

Weeding has been justified as it helps library in:

- Saving space for adding new resources to the collection,

- Improves access to resources and thus improves efficiency in service,

- Saving money being spent in maintaining additional copies and unused/ rarely used materials specially in open access system which is more expensive for maintenance,

- Keeping the collection to library's optimum size.

However some of these criteria have been criticised by scholars. It is contended that some older and seldom used materials housed in a remote storage facility, it may take some time to determine whether the library owns the item, in addition to the time needed to retrieve it. Here the argument of improving accesses does not hold true. Similarly the argument of cost saving is questioned on the ground that there are hidden cost in relegating the materials at alternative place. These include cost of modifying records, cost of transporting to alternative shelves and cost of retrieving on demand.

Weeding of books is tricky and difficult function. It requires in persons engaged in the work quality of assessing the value of a book vis-a-vis space it is occupying. It has been suggested that the issue record in the book may be taken as sign of its value for retention or for discarding. Persons involved in the work must consider all library purposes and activities while identifying title for weeding.

Self Check Exercise

Note: i)   Write your answers in the space given below.

ii)   Check your answers with the answers given at the end of this Unit.

17) Explain what you understand by weeding.

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18) Describe the aims of weeding.

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8.7.2 Criteria for Weeding

Although criteria for weeding are highly subjective, never the less however, some guidelines that have been developed are as follows:

• Information is outdated (old books in science and technology)

• Volume physically damaged beyond repair

• Old edition superseded by new available edition

• Additional copy of title not much in demand

• Material not needed due to change in user needs

• Institutional objectives have changed

• Material was wrongly purchased.

There are certain materials which though fall under one or other of the above category but are not weeded. These include classic in literature, works of seminal nature in social science and pure sciences, volumes valuable otherwise such as autographed copy, material known for calligraphy, binding and illustration by eminent artist.

8.7.3 Barriers in Weeding

Despite obvious justification for weeding materials which have out lived their relevance, the word weeding have few takers, both among librarians as well as among the authorities or the academics. Eugene Garfield is reported to have said that weeding in library is like examining an investment portfolio….. Like frustrated tycoons many librarian cannot face the fact that some of their guesses (in selection of title) have gone wrong. However one cannot deny the fact there are many a hurdles in discarding books which deserve weeding.

• Psychological – No matter how useless an item may seem at least one person in the world will find it valuable,

• Lack of time – Weeding is time consuming work and hence decision gets postponing,

• Fear of making mistake – Possibility of withdrawing wrong title,

• Anti library culture – Library culture is identified with collection building not collection breaking,

• Lack of user support – Users cooperation is rarely very positive,

• Prestige of size of collection – Till the recent librarians and authorities both valued library by the size of collection,

• Fear of faculty opposition – Lack of user support and faculty opposition is the main hurdles in the way of weeding. This factor is not peculiar to India but is a world over phenomenon.

Apart from the above barriers there are certain practical barriers to the weeding process. Beginning with preparation of proposal to selling the proposal drawing up a schedule, training staff in the mechanism of applying identified criteria, withdrawing records for each item from various places, calls for great patience. The application of certain criterion also poses problem. Identifying change in the user needs requires great expertise. The mere fact that some books have not

been borrowed for certain period is not enough evidence of change in reader's preference. Similarly decision has to be taken whether the title is to be relegated to a secondary storage or is to be discarded.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with the answers given at the end of this Unit.

19)   Explain the barriers to weeding.

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8.7.4   Weeding Process

The following steps are required to carry out weeding:

- Constitution of a team of senior staff

- Identification of titles for Weeding out

- Examination of the title by faculty members/ selection committee, in case of public library

- Final approval of the library authorities

- Separation of materials fit for relegation and those fit for discarding

- Preparation of list books for discarding

- Preparation of list for secondary storage

- Modification of various library records (catalogue, shelf list, accession register) for weeded materials

- Decision on ways of discarding (shredding, sale to second hand booksellers, free distribution as gift to other libraries).

The experience of librarians the world over is that however desirable the weeding may be the actual success in accomplishing weeding is very difficult to come by. Many a times materials considered to be suitable for weeding have been collected by librarians, but due to lack of interest in the faculty and authorities, decision on weeding could not be finalised. Ultimately it comes to only those books which are mutilated damaged or have become brittle that are approved for weeding.

8.8   SUMMARY

For long time preservation remained a marginal topic in librarianship. As a topic for study it was considered to belong to archive. The discovery by major libraries in the Western countries in the post second world war years, especially in the Library of Congress, of the imminent danger of losing a substantial number of their early Nineteenth century books sounded an alarm bell. The library launched a major project of mass de acidification. In the late fifties William j. Barrow

published his study on the chemistry of paper which disclosed that papers had inherent deficiency for survival due to presence of acid in wood-based raw material used in the manufacture of paper. Preservation now became a subject of worldwide interest. The British and American Governments and The European Community established bodies to study the problem. IFLA launched its preservation and Conservation programme. There has been much confusion about the exact connotation of the word preservation. It is safer to follow the definition given by IFLA.

The causes of deterioration of library material are both internal as well as external. The internal causes include residual acidity in paper. In case of films, it is the emission of nitrous gases and acetic acid vapor from films that results in their deterioration. Among the external causes, ultra violet and infrared rays emitted by sunlight, fluctuation in temperature and relative humidity, careless handing by staff and users, biological agents like fungus, etc. are important. In case of electronic sources/ digital data, it is magnetic stray fields, mishandling of replay instruments, virus and worms and sudden interruption in power supply. Disasters, both man-made and natural, have also inflicted irreparable loss to libraries throughout the history. Earthquake, tornado, rainstorm, wars and vandalism have destroyed many valuable collections.

Various preventive measures have been suggested to check the deterioration and damage to library resources. Use of acid free paper, protection from direct sun light on library materials, controlled environment in the library, provision of fresh air, installation of equipment such as water gaseous fire extinguishers, water sprinklers, and above all training staff and users in proper handling of library materials will go a long way in checking the malice.

Preservation of digital information can be done either by preserving the software or through re-encoding in new format. Library documents are valuable either for the content or for the style of the material. If text is important and needs preservation it can be reformatted. However if it is important for style of binding, calligraphy, painting etc., it should be given a quality binding. In all such cases while carrying out repair only such material and methods should be used which can be removed easily whenever it is required.

Maintenance of library material is an important activity of library. Without maintenance of materials in an orderly manner, identification of required book by users shall become a daunting job. Maintenance involves action at two levels. In the first place the collection is divided into certain broad groups called sequences.

These sequences are based on internal and external characteristics of the documents.

The commonly followed methods are called classified method, alphabetical by authors name or title method and serial number method. Classified methods are by far the most popular and helpful method. The other two methods are followed by libraries having small collection.

8.9 ANSWERS TO SELF CHECK EXERCISES

1) The following are some of the examples:

   i) Publication of *Deterioration of Book Stock: Causes and Remedies* by W.J.Barrow.

   ii) U. S. Library of Congress discovery that it was losing 77000 books a year due to deterioration.

   iii) Dr. F. Ratcliffe's report *Conservation: Need,Resources, Policies and Programme in British Libraries(1982-1983)*.

   iv) Flood in River Arno in 1966 submerging collection of Bibliotheca Nazonale in Florence.

   v) IFLA Programme Preservation and Conservation launched in 1984.

2) Libraries are called as social memories because they:

   • helped transmission of knowledge to later generations,

   • helped cummulation and further building up of knowledge,

   • helped development of knowledge without any purpose less repetition of efforts.

3) The main causes are:

   ▪ Prior to 19th century the quality of paper used was strong and had no inherent cause of deterioration.

   ▪ Preservation was considered to be the job of archivists.

   ▪ Librarians were more concerned with providing access than preservation.

   ▪ Library Science courses laid more emphasis on the method and materials of binding.

   ▪ Preservation meant protection of rare books and manuscripts.

4) Books published from early 19th century to the recent periods deteriorated due to internal as well as external causes.

   Internal causes include wood pulp used as raw material and process of paper making.

   Wooden pulp retains lignin which contains acid. In the process of paper making alum is used as sizing agent which is aluminum sulphate. The presence of acid leads to chemical reactions. The reactions are of two types: bond breaking because of hydrolysis, and because of oxidation. Oxidation results from presence of small quantities of metals from paper making equipments.

   External causes include light and relative humidity in the atmosphere. Which accelerate the process of deterioration through their impact on the acidity present in the paper?

5) Library materials being organic in nature are affected by changes in temperature and relative humidity. Excessive humidity leads to growth of fungus and other insects. Low humidity leads to dehydration making materials brittle and breakable. High temperature speeds up chemical reaction in all

library materials. It also leads dimensional change in magnetic carriers and eats up pigment layers of magnetic tapes and floppy discs.

6) Staff negligence mean:

- negligence at the planning of building when no provision is made against effects of ultra violet and infrared radiations.

- negligence in maintenance of building and equipments.

- negligence in making provision for environmental control in which more care is given to comforts for human beings than for library materials.

- negligence in awarding binding work to substandard firms.

7) The preventive preservation is related with:

- Light: Protect library material from infrared radiation.

- Temperature and Relative humidity: Temperature 18 ºC. Relative humidity 50%.

- Atmospheric pollutants: Ongoing arrangement for effective cleaning and dusting of the whole library.

- Biological Agents: Adapt integrated pest management system.

- Human Factor: Ongoing training both for staff and user group.

- Security: Building design must incorporate various provision required for security, enough lighting system, regular monitoring of sensitive areas.

- Disasters: A written disaster management plan with regular revision for changing situations.

8) The preventive preservation for special category materials is:

- Photograph: Keep in acid free envelop or box, Divide into active and passive collection only active collection should be accessible.

- Mechanical Carriers: Shellac discs and replay equipment should be handled only by specialists.

- Magnetic Tapes: Protect from dust, replaying instruments to be handled only by specialists.

- Optical Carriers: Protect from dust, CDs should be kept in special storage cartridges.

9) The considerations that determine need for binding a book are:

- Kind of books i.e. rare, manuscript, fiction, nonfiction, etc.

- The present value of the books.

- The future value of the books.

- Whether a new edition would replace the existing edition.

- The exiting physical condition of the book.

10) Some people are not in favour of binding of periodicals because:

- Delay affects research work.

- Bound volume can be used by only one person at a time while issues might contain articles for other too.

- Create problems in getting photo copy of articles.

11) The various style of binding are:

- Case binding

- Library style

- Flexible style

- Sunk cord style

- Limp binding

12) **External characteristics:** Size, Infrastructure needs and Security needs.

Internal characteristics: Nature of content and level of content.

13) Temporary sequences are formed on the occasion of some thematic conference, celebration of centenary of some event of certain personalities by putting materials from the various subjects into one sequence.

14) Shelving staff is required to shelve books, rectify collection and refurbish collection.

15) Stock verification has its origin in early days of libraries when collection consisted of manuscript. Librarian was considered to be custodian of books and not a facilitator in the promotion use of the collection. The system has persisted despite opinion of various library committees against it.

16) The following are the disadvantages of stock verification:

- Library remains closed.

- Users are required to return books.

- Work load accumulates in other sections of the library.

- Books are lost despite security.

- Staff time wasted in futile activities.

17) Weeding is process of identifying material in the collection which has lost its utility for users. It is also defined as the practice of discarding or transferring to storage, excess copies, rarely used books, and materials no longer in use.

18) The aims of weeding are:

i)   saving space for new addition,

ii) improving access to resources,

iii) saving money on maintenance of books,

iv) keeping collection at optimum size.

19) The main barriers of weeding are:

- Psychological- No matter how useless an item may seem at least one person in the world will find it valuable.

- Lack of time- Weeding is time consuming work and hence decision gets postponing.

- Fear of making mistake- Possibility of withdrawing wrong title.

- Anti library culture- Library culture is identified with collection building not collection breaking.

- Lack of user support- Users cooperation is rarely very positive.

- Prestige of size of collection- Till the recent librarians and authorities both valued library by the size of collection.

- Fear of faculty opposition- Lack of user support and faculty opposition is the main hurdles in the way of weeding. This factor is not peculiar to India but is a world over phenomenon.

8.10 KEYWORDS

Cellulose Acetate	:	An organic compound of acetic acid.
Cellulose Nitrate	:	An organic compound of nitric acid.
Collation	:	Thorough checking of bound book for correct pagination, sewing quality and other details.
End Paper	:	Blank paper of mild colour placed at the two ends of the book before the cardboard covers.
Forwarding	:	operation required to complete the binding.
Fungi	:	Plural of fungus organism feeding on organic matter. It includes mould that grows in moist warm condition.
Hydrolysis	:	Chemical reaction in a substance that leads to its decomposition.
Infrared Waves	:	Part of the light spectrum having a wave length just greater than the red end of the spectrum.
Iron Gall	:	Iron rust.
Lignin	:	Chemical found in wood that binds together plant cells.
Lux	:	Unit of measurement for light intensity.
Open Access	:	Free entry to book storage area.
Oxidation	:	Organic matter getting coveredwith oxide.
Relative Humidity	:	Water vapor in the air as % of maximum amount that the air could hold at the same temperature.
Sheet on Sewing	:	Sewing style in reinforced binding. Reinforced because sewing in final Section gets double stitch.
Split Board	:	Board made up of a laminated mill board and straw board with a slit to contain the flange of tapes.

Square	:	The projected end of the board beyond the text of the book.
Sizing	:	Reducing papers ability to absorb liquid by using gelatin or animal glue.
Social Memory	:	Library as store house of accumulated human knowledge is called social memory.
Tanning	:	Converting raw hide into leather through dipping it into chemical liquid.
Telephone Tree	:	List of phone numbers to used in emergencies.

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UNIT 9   DISASTER MANAGEMENT

Structure

9.0   OBJECTIVES

Protection of library resources from damages caused by various kinds of disasters has now become an integral part of preservation. Natural disasters such as flood or earthquake or manmade disasters such as negligence of maintenance of library building and the various equipments have often led to the total destruction of a library.

After reading this Unit, you will be able to:

- describe the nature of disaster and know about some disasters that have affected libraries;

- explain national and international measures to safeguard libraries against disasters;

- describe disaster management planning including provision for disaster management in library buildings;

- identify the stages of disasters and prepare suitable plan for each stage; and

- highlight the security measures against manmade disasters.

9.1   INTRODUCTION

Disaster is an event that inflicts sudden disruption to the functioning of a system under its impact. It causes such a wide spread, material and environmental losses which exceeds the ability of the body affected to cope with, using only its own resources. In the context of library it has been described as "an unexpected event with destructive consequences to their holdings. It may be a small scale incident

or a full blown emergency, but in either case it requires prompt action to limit damage". Disaster causes harm not only to holdings, it might cause harm even to buildings, staff, and users and disrupt normal services for considerable period.

9.2   HISTORICAL BACKGROUND

Libraries have suffered damages due to disaster of one kind or other throughout the history. The famous Alexandria Library, established around 300 B.C. is said to have contained between 400,000 and 700,000 documents in its peak period with literature from Assyria, Greece, Persia, and India. The Library was completely gutted in wars during the reign of Caesar (100 BC-44 BC) The libraries of Nalanda and Texila which had attracted scholars from China, Mongolia and Sri Lanka are now found in the pages of books only. Lightning in 188 AD in Rome, in 1300 AD in France and in 1674 in Spain were responsible for the destruction of several libraries in the respective countries. The libraries that flourished during the medieval period in India and were established by Kings of Vijyanagar, by the Great Mughals, Tippu Sultan and by Nawabs of Awadh, were vandalised by the British who later transferred the entire booty to England. To this day scholars working on Indian history have to travel to England to look at the basic sources on Indian history now available in the British Library.

The story of disasters did not end with the medieval period. The modern period has also witnessed destruction of libraries world over through wars, lightning, floods, tsunamis, theft and vandalism. The two World Wars are responsible for the destruction of many famous libraries in Europe. One example is of the library of the University of Louvain, Belgium which was destroyed in German invasion in the First World War resulting into loss of about 300,000 books .The Serbian attack on Bosnia-Herzegovina in 1992 is reported to have destroyed the National Library of Sarajevo resulting into loss of almost its entire collection of 1.5 million volumes including some 70000 rare manuscripts. Large scale destruction was caused to archives, libraries, and other cultural institutions during American invasion on Iraq in 2003. It included Iraq's National Library, National Museum the National Archives. *Bait-al-Hikma* in Iraq lost, according to IFLA, 500,000 books and serials including 5000 extremely rare books.

The flood in River Arno, in 1966, damaged one million volumes of Florence Biblioteca Nazionale Centrale of Italy. Floods in Europe in 2002 damaged libraries in Austria, Germany, Hungary, Slovakia and Czech Republic. In1985 a fire caused by lightning at the library of The Dalhousie Law School, Nova Scotia destroyed 60000 volumes, much of the library's furnishing and fittings, including its card catalogue. The library of the USSR Academy of Sciences lost about 400,000 volumes in fire in 1988. Flood in Hyderabad in 2005 submerged in flood water Sunderayya Vignana Kendra library's more than1.25 lakh books, periodicals, manuscripts and other rare materials.

The library of the Sanskrit University, Dang, Nepal lost its valuable collection of manuscripts in an attack by mob in 2003. The library of the Bhandarkar Institute of Oriental Research was ransacked by an ill-informed mob over publication of a book on Shivaji which contained some reference to a manuscript available in the Institute' s library. A fire started by arsonists in 1986 destroyed about 400,000 books of the Central Library of the Los Angeles Public Library system.

The terrible tsunami that hit coastal areas of the Indian Ocean in December 2004 caused damage to 177 school libraries, 53 public libraries and 68 religious libraries in Sri Lanka alone. Libraries in Maldives also were reported to have suffered damage. Water damage was also reported by the Madras University Library. A devastating Hurricane, Katrina in the Gulf of Mexico, caused considerable damage to libraries in the area.

National and International level awareness

Though the occurrences of disasters have long history, the planning for preventive measures to meet the situation, both at national and international level are not very old. According to Ross Harvey "it was not however until the late 1970s that it could be said that disaster planning was widely recognised as an essential part of good library management." The planning at the national level began in Canada, US, and UK towards the end of the last century. At the international level organisations like the International Council on Monuments and Sites, International Council of Museums, IFLA, International Council on Archives joined hands to form an International Committee of Blue Shield in1996. The Committee is to collect and disseminate information on disaster management policies and, coordinate action plan in emergency situations. The main objectives of the Committee are:

- To facilitate international responses to emergencies threatening cultural properties.

- To encourage safeguarding and respect for cultural property especially by promoting risk preparedness.

- To train experts at regional and national levels to prevent , control and recover from disasters.

- To act in an advisory capacity for protection of endangered heritage items.

- To consult and cooperate with other bodies including Unesco, International Committee of Red Cross, etc.

The activities and functions undertaken by the Committee to fulfil its objectives are:

- Collecting and sharing information on threats to cultural property worldwide;

- Raising public awareness about damage to cultural heritage;

- Promoting good standard for risk management among those responsible for cultural heritage at all levels, from institution to government;

- Working to make decision makers and professional staff aware of the need to develop preventive preparedness, response and recovery measures;

- Providing professional expertise to help meet emergencies;

- Identifying resources for disaster prevention and for rapid intervention in emergencies;

- Encouraging the establishment of National Blue Shield Committees'.

The Unesco launched its Memory of the World Programme in 1992, with the objective that "world's documentary heritage belonging to all should be fully preserved and protected for all and with due recognition of cultural mores and practicalities should be permanently accessible to all without hindrance." It has also published a book with the title, *Lost Memory*: *Libraries and Archives Destroyed in the Twentieth Century* written by J. Van Albada and H.Van Ha.

Note: i)   Write your answers in the space given below.

ii)   Check your answers with the answers given at the end of this Unit.

1)   Give a brief summary of disasters in Europe in modern period.

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2)   List objectives of Blue Shield Committee.

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9.3   CAUSES OF DISASTERS

Libraries like any other institution are exposed to various kinds of disasters which destroy building, burn or submerge books and other valuable records in water. Many a times these damages are irreparable. Fire and or water as source of disaster may be the primary factor or they may follow a disaster like earthquake, flood, lightening, etc. The causes of disasters have been categorised by nature of their origin. Those that occur in the form of natures' fury, such as earthquake, tsunami or flood in rivers are called natural disasters. Natural disasters are so unpredictable that they often take the organisation by surprise. These include flood, earthquake, volcanic eruption, wind or rain storm, lightning and tsunami. Disasters that are caused due to negligence or deliberate criminal acts of human beings are called manmade disasters. These include arson, vandalism, war, theft, building deficiencies, and/or negligence of staff of their assigned duties.

9.3.1   Natural Disasters

Some examples of natural disasters are:

Floods: As mentioned earlier, flood in River Arno, in 1966, resulted into flooding of the Florence's Biblioteca Nazionale Central of Italy. During August 2000 flood in Hyderabad priceless collection of Sunderayya Vignana Kendra Library was submerged in water. Flood waters destroyed basic source materials on famous Urdu poet Iqbal's original letters preserved by the Jammu University.

Earthquake: An earthquake in Muzaffrabad, Pakistan-held Kashmir, in 2005, made people who were rendered homeless, burn 1000 books to keep themselves warm in the biting cold of the winter months.

Tsunami: Tsunami in 2004 destroyed school, and public libraries in Sri Lank and Maldives.

Lightning: Lightning in 1985 destroyed 60000 books of the Dalhousie Law School US, library.

9.3.2 Man–made Disasters

Under this category we may put such emergency situations that occur due to an unintentional or deliberate action of people (staff and users). It includes act of war and terrorism, fire following short circuit, flooding of library due to pipe burst or leakage. Building design deficiency and poor maintenance of the building also may lead to an emergency situation. Sometimes power failure also leads to emergency situation. Flooding, once the water subsides, leaves dampness in its aftermath which becomes cause of biological agents that inflict damage to the books.

War and Arson: The earliest example of destruction and damage to library due to war, as mentioned earlier, is that of Alexandria Library which was burnt in war during the reign of Caesar in the second century BC. In the first half of the last century the two World Wars inflicted irreparable damages to libraries in most of the European countries. The recent examples are those of the Serbian attack on Bosnia-Herzegovina in 1992, US attack on Iraq in 2003 and USSR attack on Afghanistan in 1979. In the US in 1980-81, there were 23 reported cases of library fires and of which 17 or 85% were listed as arson fires.

Theft: Thefts have caused damage not in terms of scale as in terms of value to libraries. Most of the books pilfered from libraries are scarce and very rare books with painting or some other artifacts."Within a few days of forces entering Baghdad, the looters ransacked the National Museum and stole about 15000 priceless artifacts" (The *Hindu 18. 9. 2010).*

Building Deficiency and Negligence: The US National Fire Protection Association while investigating causes of fire at the Los Angeles Central Library of 1986 observed that the disaster could surely have been avoided by the utilisation of an automatic water sprinkler system. The cause of the 1988 fire in the Library of the USSR Academy of Sciences was traced to defective electric wiring. In the Patent Registration Office library, Government of India, Kolkata, 1.56 lacs Indian and 8 lacs foreign patent literature are facing decay due to lack of adequate preservation measures .

Self Check Exercise

Note: i)   Write you answer in the space given below.

    ii)   Check your answer with answers given at the end of this Unit.

3)   What are natural disasters? Give examples.

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9.4   DISASTER MANAGEMENT PLANINNG

Disaster planning is a matter of basic security for libraries and archives and has now become an integral part of library preservation planning. It has been called as one aspect of good library administration practice. Though called by names such as disaster control planning, disaster containment, contingency planning and risk management, in essence it is a set of rehearsed actions to minimise the effect of a disaster. It requires the library to always remain in a situation of emergency preparedness. Emergency preparedness is a continuous and integrated process and aims at:

1)   Increasing the efficiency, effectiveness and impact of disaster emergency response mechanism;

2)   Strengthening staff and user based preparedness through dissemination of guidelines for warning system, evacuation and exit routes, salvaging activities;

3)   Developing activities that are useful for day to day preservation problems and also for responding to disaster situation.

The preparedness calls for taking certain basic steps which include:

• Study of the library for potential problem in consultation with local fire and safety services agency.

• Preparing a disaster planning manual and keeping it up-to-date.

• Develop list of items in the collection for storage with safety priority. (It is normal to put the materials into three levels, irreplaceable and costly materials, materials that are difficult to replace, rest of the materials).

• Preparing and keeping up-to date toll-free telephone phone numbers for use in emergency.

• Preparing and keeping up-to-date a complete inventory of library assets (excluding reading materials) to be used for insurance claim. The claim for collection can be based on accession record.

• Preparing a list of external resources experts, and organisations to be used in emergency and constituting a planning team for handling emergency situations.

9.4.1   Aims and Objectives

The aim of disaster management is the creation of a scheme to handle an emergency situation that may affect a library and its holdings. The objectives of such a scheme are: 1) to prevent a disaster whatever its magnitude, 2) to protect library materials in the event of a disaster and 3) In its aftermath to restore and stabilise library materials prior to restoration and conservation.

The disaster relief plan helps the situation in several ways:

1)   By increasing the efficiency effectiveness and impact of disaster emergency response through:

• Development and regular testing of warning system,

• Plan for needed evacuation and other measures during emergency alert period,

- Education and training of staff and users and of first aid and emergency response team,

- Formulating emergency response policies, standard, organisational arrangements and post disaster operations.

2) Developing activities useful for addressing both every day risks and for responding to disaster situation e.g. first aid and social welfare program me for affected people.

3) Strengthening library based disaster preparedness education in and restoration work.

4) Making staff confident that orientation and training given is sufficient to meet an emergency situation.

5) Making staff confident that public and private agencies on the list for contact in emergency situation are aware of the special needs of library.

6) Succeeds in restoring normalcy promptly and efficiently in post disaster situation.

7) Makes staff able to reduce recurrence of disasters in the light of experience gained during a disaster.

9.4.2 Disaster Prevention Measure in Building Design

You have already noted in brief the disaster prevention as part of planning the building in Unit 6. In fact, planning for disaster management is done at two stages: 1) While planning the building by incorporating features necessary for retarding the possibility occurrence of disaster. 2) In post-construction stage planning with all other measures and activities to face the disaster and also post-disaster situation. In designing the building, the first and the foremost is to select site outside the seismic zone. Site should also be slightly elevated and easily accessible for fire engines and other emergency vehicles. Other points for consideration include:

- Building structure based on the principle of compartmentalisation,

- Separate room for storage of inflammable liquids,

- Use of fire retardant materials in construction,

- No storage provision for rare materials in basement and at the top floor,

- Pitched roof with no water or drainage pipes over book storage areas,

- Provision of fire suppression system,

- Openings in building for air and light to be vandal and thief resistant,

- Provision of fresh air flow around HVAC areas.

Self Check Exercise

Note: i)   Write your answer in the space given below.

ii)   Check your answer with answers given at the end of this Unit.

4)   Explain how disaster relief plan helps libraries in the event of disaster.

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9.4.3 Disaster Management Plan

A disaster plan involves activities under four phases, namely prevention, preparedness response and recovery.

Phase 1: Prevention

Prevention phase is primarily concerned with such measures as are expected to be taken at the stage of planning the building. These are to Identify and minimise the risks posed by the building, its equipments and fitting and the natural hazards of the area and include activities as below:

- Carry out a building inspection and alter factors which pose a potential hazard.

- Establish routine housekeeping and maintenance measures to withstand disaster in buildings and surrounding areas.

- Install automatic fire detection and fire extinguishing systems and water sensing alarms.

- Take special precaution during unusual periods of increased risks such as building renovation.

- Make special arrangements to ensure the safety of rare and archival material when exhibited.

- Provide security copies of vital records such as collection inventories and store these off site.

- Protect computers and data through provision of uninterrupted power supply.

- Have comprehensive insurance for library or archives, its contents the cost of salvage operations and potential replacement, re-building and restoration of damaged materials.

Phase 2: Preparedness

Preparedness is concerned with making preparations for facing an actual occurrence of a disaster. The activities to face the situation include:

- Develop a written preparedness response and recovery plan.

- Keep the plan up-to-date with regular test.

- Keep together supplies and equipment required in a disaster and maintains them.

- Establish and train an in-house disaster response team. Training should be in disaster response techniques, identifying on floor plan enclosures of irreplaceable and important materials for priority salvage.

- Prepare and keep a set of documentation including:

  - Building floor plans with locations of cut-off switches and valves.

  - Inventory of holdings, with priorities for salvage marked on floor plans.

  - Telephone tree i.e. List of names, addresses and home telephone numbers of 1) personnel with emergency responsibilities 2) In-house disaster response team 3) of trained conservators who could offer various technical supports.

  - List of disaster control services, in-house supplies and equipments, of suppliers of services and additional equipments/supplies.

–   Arrangements for funding emergency needs.

–   Copies of insurance policies.

- Keep the plan and documentation at appropriate places on and off-site.

- Institute procedures for notification to appropriate people of the disaster.

Phase 3: Response

The steps that should be taken when disaster strikes are termed as response and include:

- Following established emergency procedures for raising the alarms, evacuating personnel and making the disaster site safe.

- Contacting the leader of the damage response team to direct and brief the trained salvage personnel.

- When permission is given to enter the site, make preliminary assessment of the extent of the damage, and the equipment, supplies and services required.

- Stabilize the environment to prevent the growth of mould.

- Photograph damaged material for insurance claim purposes.

- Setup an area for recording and packing material which requires freezing, and an area for air drying slightly wet materials and for other minor treatment.

- Transport water -damaged items to the available facility centre.

Phase 4: Recovery

Recovery phase involves activities carried out to bring back normal situation in the library by taking the following steps:

- Draw a programme to restore both the disaster site and the damaged materials to a stable and useable condition.

- Decide priorities for restoration ,consult conservators about the best methods for restoration and options along with cost under each method.

- Determine item by item needs for retaining, discarding, and rebinding or needing special treatment.

- Clean and rehabilitate the disaster site.

- Replace treated materials in the refurbished site.

- Analyse the disaster and the steps taken in its wake for needed revision and modification of the steps for the future.

Self Check Exercise

Note: i)   Write your answer in the space given below.

      ii) Check your answer with the answers given at the end of this Unit.

5)   List measures to be taken in prevention phase of disaster plan.

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9.5   SECURITY SYSTEM

The security of the library is concerned with the safety of the staff and the users. It is also provision against theft of library resources and assets and general protection of the library building. Studies in US revealed that loss to libraries through theft has been as serious as loss through fire and is estimated to be around 50 million per annum.

Safety and security provisions should be incorporated both at the time of design of building and on a regular basis.

At the stage of designing building:

• Avoiding unnecessary rear doors and strengthening essential access point.

• Interior layout design should allow for maximum visibility of public areas.

• Providing burglar resistant bar/grills on rear windows.

• Installing an alarm system and necessary emergency exits.

• Provision for installation of CCTV and RFID.

• Adequate provision for lighting both in the interior and exterior of the building.

• Fitting of turnstile door at the exit point.

• Intrusion alarm system in special collection areas.

On a regular basis:

• Adoption of closed access system for special/ rare collection.

• Main door and rare material room door keys should have authorisation and recorded transaction system.

• Use of standard quality locks.

9.5.1   Insurance

The financial loss suffered by a library under disasters are often huge and it includes loss of content, cost of salvage operations and potential replacement, re-binding and restoration of damaged materials and re-building of damaged portions of the building.

There is, therefore, enough justification for taking a insurance policy against disaster. The policy should be comprehensive enough to cover all likely losses. However, since the insurance cover negotiation involves use of many technical terms it must be negotiated by a person conversant with the insurance terminologies. In case of occurrence of a disaster the losses must be reported to the company promptly once the situation stabilises. The library therefore must preserve the records of all its valuable materials to be covered in the policy and it must be preserved at a safe place away from the site. The insurance schedule must be reviewed periodically for enhancement of the value of the items covered as they keep changing. In this regard a written disaster management plan is helpful in making claim with the insurance company.

9.6 SUMMARY

Disasters are disruption or damage to the library by natural factors such as flood or earthquake or due to negligence or deliberate action of human beings such as war, arson and theft. There is a long history of disasters which destroyed many libraries. There is now national and international level awareness and preventive measures to safeguard libraries from disasters. Disaster management has now become an integral part of library management.

9.7 ANSWERS TO SELF CHECK EXERCISES

1) Major disasters in Europe in modern period are:

   First World War, Library of University of Louvain, Belgium.

   Herzegovina, National Library of Sarajevo.

   Flood in River Arno, Italy.

   Second World War, Libraries in Austria, Germany, Hungary, Slovakia, Czechoslovakia.

   Russia: Academy of Sciences Library.

2) The objectives of Blue Shield Committee are:

   1) To facilitate international responses to emergencies threatening cultural properties,

   2) To encourage safeguarding and respect or cultural property especially by promoting risk preparedness,

   3) To train experts at regional and national levels to prevent, control and recover from disaster,

   4) To act in advisory capacity for protection of endangered heritage items,

   5) To consult and cooperate with other bodies including Unesco, International Committee of Red cross, etc.

3) The examples of natural disasters are:

   • Flood: River ARNO, Italy 1966

   • Earthquake: San Francisco 1989 Los Angeles Library

   • Tsunami: 2004, Sri Lanka, Maldives

   • Lightning: US 1985, Dalhousie Law Library.

4) The disaster relief plan helps libraries during disasters in the following ways:

   1) By increasing the efficiency, effectiveness and impact of disaster emergency response.

   2) Developing activities use full for addressing both everyday risks and for responding to disaster situation.

   3) Strengthening library based disaster preparedness education and restoration.

   4) Making staff confident that orientation and training given is sufficient to meet an emergency situation.

   5) Making staff confident that public and private agencies on the list for contact in emergency situation are aware of the special needs of library.

6) Succeed in establishing normalcy promptly and efficiently in post disaster situation.

7) Makes staff able to reduce recurrence of disasters in the light of experience gained during a disaster.

5) The measures to be taken in prevention phase of disaster plan are:

- Carry out building inspection to remove any potential hazard,

- Establish routine housekeeping and maintenance measures to withstand disaster,

- Install automatic fire extinguisher and detection system and water sensing alarm,

- Take special precaution during unusual periods of increased risks,

- Make special arrangements to ensure the safety of rare and archival materials during exhibits,

- Provide security copies of vital records such as collection inventories, to be stored off site,

- Protect computers and data by providing uninterrupted power supply, and

- Take out a comprehensive insurance policy for total estimated loss.

9.7 KEYWORDS

Compartmentalisation : Construction of library building so that compartment/ unit can be sealed in case of emergencies like fire.

Cultural Properties : Items which display the life and culture of a social group.

Heritage Items : Products of craftsmanship and art such as old buildings, sculpture.

Pitched Roof : Sloped roof to allow quick water flow.

Telephone Tree : List of telephone numbers showing who will call whom in which order.

9.8 REFERENCES AND FURTHER READING

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