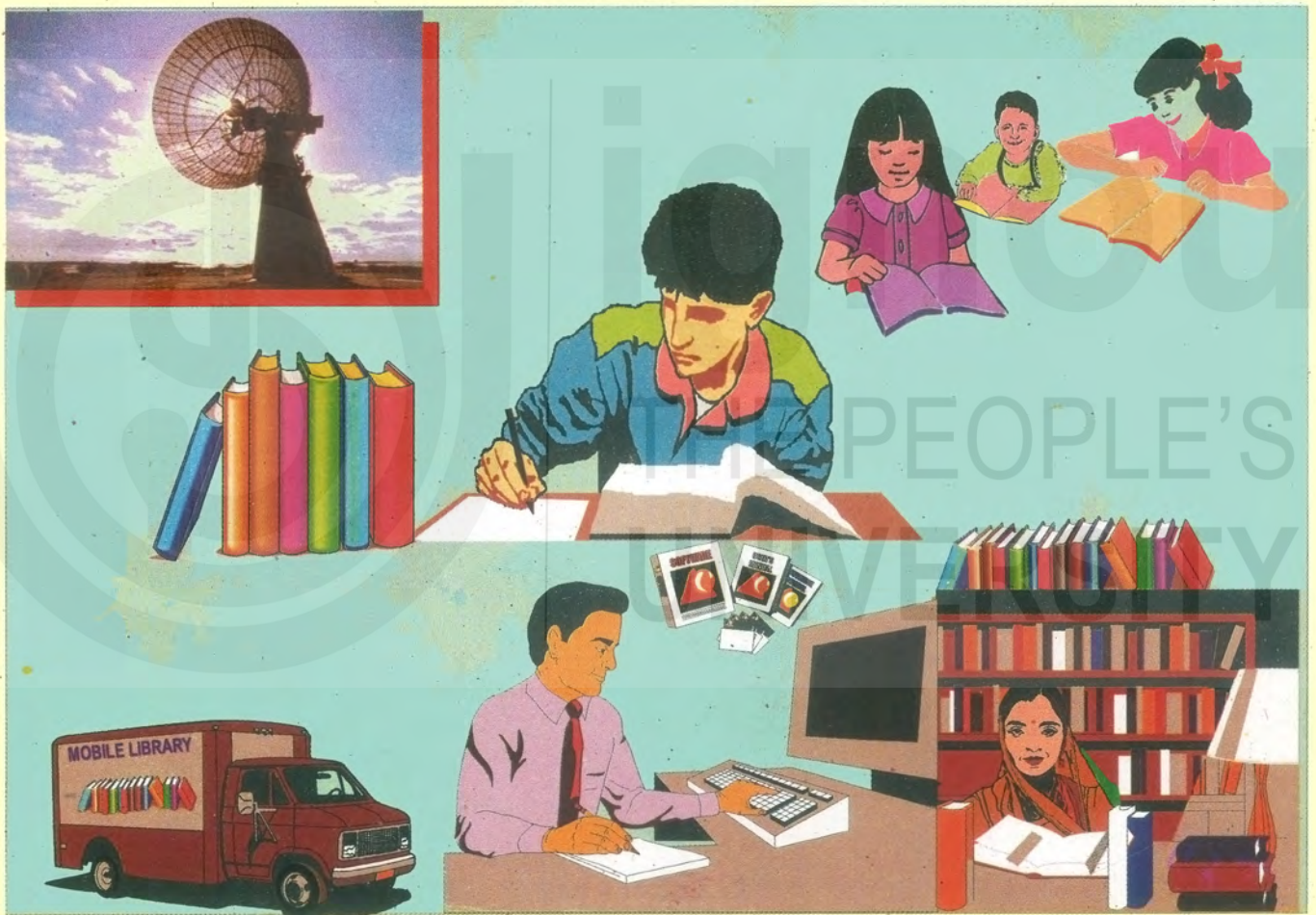




Indira Gandhi National Open University
School of Social Sciences

MLIS-E6

PUBLIC LIBRARY SYSTEM AND SERVICES



“शिक्षा मानव को बन्धनों से मुक्त करती है और आज के युग में तो यह लोकतंत्र की भावना का आधार भी है। जन्म तथा अन्य कारणों से उत्पन्न जाति एवं वर्गगत विषमताओं को दूर करते हुए मनुष्य को इन सबसे ऊपर उठाती है।”

— इन्दिरा गांधी



ignou
THE PEOPLE'S
UNIVERSITY

“Education is a liberating force, and in our age it is also a democratising force, cutting across the barriers of caste and class, smoothing out inequalities imposed by birth and other circumstances.”

— Indira Gandhi



Block

4

PUBLIC LIBRARY SERVICES

UNIT 14

Types of Library Services

5

UNIT 15

Application of Information Technology in Public Library Services

27

UNIT 16

Resource Sharing and Networking

38

UNIT 17

Public Library Scenario in India, UK, USA and Canada

58

PROGRAMME DESIGN COMMITTEE (1991)

Prof. Pandav Nayak (<i>Chairman</i>) Director, School of Social Sciences, IGNOU, New Delhi	Prof. T.N. Rajan Chief Coordinator (Retd.) INSDOC, New Delhi	Prof. M.A. Gopinath Director DRTC, Bangalore
Prof. A.P. Srivastava Chief Librarian Delhi University, Delhi	Prof. T. Viswanathan Director INSDOC, New Delhi	Dr. (Ms) Neela Jagannathan (Special Invitee) Deputy Librarian IGNOU, New Delhi
Prof. B. Guha Professor (Retd.) Dept. of Lib. & Inf. Sc BHU, Banaras	Prof. K.S. Raghavan Dept. of Lib. & Inf. Sc. Madras University, Madras	*Dr. R. Satyanarayan (Convenor) Reader, Faculty of Lib. & Inf. Sc. IGNOU, New Delhi
Prof. (Ms) A.K. Anand University Librarian (Retd.) Chandigarh	Prof. S.R. Gunjal Dept. of Lib. & Inf. Sc. Gulbarga University, Gulbarga	Internal Members Dr. Uma Kanjilal Ms. Neena Talwar Kanungo Faculty of Lib. & Inf. Sc. IGNOU, New Delhi
Dr. S.S. Murthy Director DESIDOC, Delhi	Prof. S.G. Mahajan Dept. of Lib. & Inf. Sc. University of Poona, Pune	*Subsequently appointed as University Librarian and Officer-in-Charge LIS Programme
Shri N.M. Malwad Librarian IISc., Bangalore	Prof. J.C. Biniwal Dept. of Lib. & Inf. Sc. NEHU, Shillong	

PROGRAMME COORDINATORS

Prof. S.B. Ghosh and Dr. Pravakar Rath

COURSE DESIGN COMMITTEE (1999)

Prof. S.B. Ghosh (Chairman) IGNOU, New Delhi	Dr. S.G. Mahajan Pune	Prof. D.R. Kalia New Delhi
Mr. S.M. Salgar INFLIBNET, Ahmedabad	Dr. V. Vekatappaiah Tenali (A.P.)	Prof. A.P. Srivastava New Delhi
Mrs. Kalpana Dasgupta Central Secretariat Library New Delhi	Prof. R. Satyanarayana IGNOU, New Delhi	Dr. R. Bhattacharya RRRLF, Calcutta
Dr. Uma Kanjilal IGNOU, New Delhi	Dr. Neena Talwar Kanungo IGNOU, New Delhi	Dr. Pravakar Rath Course Coordinator (Convenor) IGNOU, New Delhi

BLOCK PREPARATION TEAM

Unit	Contributor	Course Editor	Language Editor	Secretarial Assistance
14.	M.N. Nagraj	Dr. Pravakar Rath	Mrs. Shashi Sinha	Rajiv Kumar
15.	Dr. K. A. Raju			Atul Kumar Vasistha
16.	Dr. V. K. Thomas			
17.	Dr. P. K. Rath			

May 2007 (Reprint)

© Indira Gandhi National Open University, 2003

ISBN-81-266-0730-0

All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the Indira Gandhi National Open University.

Printed and Published on behalf of the Indira Gandhi Open University, New Delhi-110068 by Director, School of Social Sciences.

Paper Used : Agro-based Environment Friendly.

Lasertypeset by Mctronics Pintographics, 1092/1, Meharuli, New Delhi-110 030. Ph : 26641130

Printed at Prabhat Offset Press, N.D. 2

BLOCK 4 PUBLIC LIBRARY SERVICES

After going through all the previous three blocks, you should be able to know the importance of public libraries, developing physical, financial, human resources and the management of a public library system. The last but not the least is how effectively and efficiently public libraries could provide their services to users at large. This is possible when public libraries are computerized and networked among themselves so that resources of one library could be shared by another library for the benefit of the users.

This block consists of four Units.

Unit 14 outlines the types of library services such as circulation services, reference services, bibliographic services, community information services, extension services etc.

Unit 15 explains the advances of Information Technology and its application in public library to provide effective library services to users at large.

Unit 16 discusses the importance of resource sharing and networking among public libraries. The basic requirements of such a network are enumerated such as hardware, software, standards, formats, etc. followed by recent trends in networking of public libraries and role of Internet.

Unit 17 provides a broad scenario of the public library system and services in India, UK, USA and Canada.



ignou
THE PEOPLE'S
UNIVERSITY

UNIT 14 TYPES OF LIBRARY SERVICES

Structure

- 14.0 Objectives
- 14.1 Introduction
- 14.2 Circulation Services
 - 14.2.1 Interlibrary Cooperation
- 14.3 Reading Room Services
 - 14.3.1 Photocopying Services
- 14.4 References Services
- 14.5 Bibliographical Services
- 14.6 IT Based Services
- 14.7 Community Information Services
- 14.8 Children's Services
- 14.9 Extension Services
 - 14.9.1 Branch Libraries
 - 14.9.2 Bookmobiles
 - 14.9.3 Services for Illiterates
 - 14.9.4 Young Adult Services
 - 14.9.5 Services for Adult Learners
 - 14.9.6 Services for Senior Citizens
 - 14.9.7 Services for People with Disabilities
 - 14.9.8 Prison Libraries
 - 14.9.9 Other Activities
- 14.10 Summary
- 14.11 Answers to Self-Check Exercises
- 14.12 Key Words
- 14.13 References and Further Readings

14.0 OBJECTIVES

After studying this Unit, you will be able to:

- understand the generic concept relating to various types of services that can be provided in a public library;
- know about the main target groups for each type;
- feel the importance of library services for the various groups; and
- find out the various areas of services offered for the groups.

14.1 INTRODUCTION

Libraries today are a widespread vital service institution. The new attitude of the public library is to carry its message out to the people who are still unaware of it, and to serve the people who visit it in their pursuit of knowledge. The services of the public library are provided on the basis of equality of access for all, regardless of age, race, sex, religion, nationality, language or social status.

The four main functions of the public library are to foster education, disseminate information, provide scope for recreation, and promote culture. *Planning and Role Setting of Public Library*, published by the ALA in 1987 identifies the following roles of the public library as:

- community activities centre,
- community information centre,
- formal education support centre,
- independent learning centre,
- pre-schooler's door to learning,
- reference library, and
- research centre.

Library services available throughout the world vary so much from country to country, from one area in the same country to another area, and from one city, town, or village to another city, town or village. As such it is very difficult to draw a particular pattern of its services; however, they follow a broad but discernible pattern that has evolved over the last one hundred and fifty years.

Public libraries range in size from massive buildings with dozens of branches to small rural libraries that occupy only one room.

The services of the public library are designed to facilitate and invite use of resources and satisfy the reading goals of individuals of all ages and groups. The services rendered are numerous and in most cases not easily measurable. The UNESCO Statistical Yearbook only mentions holdings, budget, and personnel for public libraries in each nation but say nothing about services.

The services include 'organising materials for ease of access and convenient use through cataloguing, classification and shelf arrangement; lending procedures that provide an equal opportunity for all patrons to use the materials; guidance to the user in finding materials and using library resources and stimulation of use of materials through publicity, display, reading lists, story hours, books and films discussions, and planned reading programmes. Other services include providing information service, both to persons who come to the library and to those who may not come to the library but seek information through telephone (or write letters); giving assistance to cultural, civic, and educational organisations in finding and using materials; sponsoring cultural programmes in the library for children, young people and adults; collecting special materials of interest to the community; borrowing materials on interlibrary loan; making computer searches; extending library services to all points of the community through branches, deposit stations, and book mobiles; organising the library for easier access and specialised services into subject departments and departments for age levels; and coordinating the library programme with other educational and cultural services in the community' (Gates, 1990).

14.2 CIRCULATION SERVICES

The borrowing of books for home reading is the most widely used of all public library facilities. Presuming that the reader has been helped by a proper reference service to choose the book he wants to read at home, the routines involved in allowing him to take it out or borrow should be clearly charted out and administered with precision.

Rules governing circulation work should include, among other things, days and hours of opening, admission to the library, loan privileges with details of membership, reader's tickets, conditions of loan, loan period overdue implications, loss and care of books. The rules should be clear, precise and as simple as possible for better administration. Rules and regulations are required in order to achieve the library's objective - that is using of more and more books by more and more people - and to clarify the rights and privileges as well as the duties and responsibilities of the borrower. The rules may vary according to local conditions but in all cases their influence on the public's attitude towards the library should be borne in mind. The

rules should stress the fact that everybody in the community has free access to the library. Friendly contact between the library and the borrower will be more easily established if prohibitions and negative stipulations are avoided as far as possible.

Normally, the new borrower is asked to fill out a registration form, which should include among other details a general agreement to observe the rules and regulations in force. The registration forms are numbered thus providing a record of the number of library's borrowers.

Organising and administering a lending library service is a very important element in public library work as it is on the performance of this function that many people will judge the success of a whole range of public library services. The library's building, the stock of books and decor in itself is not sufficient unless there is a visible encouragement for the use of books, its security and control and the arrangements for meeting the borrowers' needs, either locally or through inter library loan services.

The choice of a charging system will depend upon the size and frequency of use of the library. This prescribes the physical task of charging and discharging library materials either by a mechanical method or one of the many existing manual methods. Apart from the conventional changing systems like Newark and Browne's changing systems, now a days Bar code system is also available.

The main characteristics of a circulation control system or charging/discharging system should be that:

- the system must be simple for the public to use and for the library staff to understand and to operate with ease and speed;
- the system must be economical in relation to the total library budget;
- in the case of branch library operations, the system must be adaptable to the main library's operations;
- the system should be adaptable to varying loan periods;
- the system should minimise excessive delay caused by a long queue of borrowers at the circulation desk; and
- in case of branch library operations, the system should permit return of books anywhere in the library system.

The system should be able to:

- identify materials loaned out;
- identify the borrower of a particular item;
- secure return of the materials, if not returned within a reasonable period after the due date, by sending reminders;
- provide a total number count of all materials charged out;
- provide facilities to update the records;
- permit making requested books available to borrowers as well as to readers who want to use the book inside the library premises as promptly as possible, through an efficient reservation system;
- to find out where every book is at any given time and being able to conveniently recall any book prior to the due date; and
- to provide statistical information regarding book usage by category and, if need be, in more detail, by individual book.

There are a number of charging systems in use ranging from writing out details of books borrowed, name of the borrower, and due date in a ledger to the latest automated system using bar codes in books, readers' cards, and recording all transactions by the use of a computer.

The Browne and Newark systems, which are in wide use in England and the USA respectively, are the ones mainly used the world over, some times with modifications to suit internal and local needs.

A charging system, which is speedy and accurate, should be chosen as the continued development and success of a library mainly depends on satisfied readers and not necessarily on the slickness and modernity of its mechanisation.

Reservation of books

An important aspect of the circulation unit is the reader's request or reservation system. This is a procedure by which a borrower can request for a particular book which is on loan to another borrower and ask the circulation desk to hold it for him to collect at a later date after the book is returned to the library. Reservations are a nuisance administratively but they must be regarded as an essential part of the service. While some large public libraries do not allow requests for reservation for fiction some public libraries exclude recently published books also from this service. In Great Britain, the Public Libraries and Museum Act, 1964 permits a charge to be made for informing the borrower about the availability of a book requested by him. The library holds the book for a specific period after informing him. Not all libraries charge in the same manner. While a large number charge for postage only, some charge for overhead costs as well as postage which may include charges for staff time to do this work. The request, when not met by the library's own collection of books or met by acquiring a new copy, is handled effectively through inter library loan.

Fines

Fines for overdue books are charged merely as an inducement to secure the return of books within the loan period and so keep them in circulation. Some libraries do not use the term fine as it connotes a penalty for dereliction of duty but use a softer term: 'late fee'.

Period of loan

Most of the libraries issue books for a period of fourteen days only and renewable, if it is not required by any reader. The period of loan can be flexible depending on the total stock, the staff employed for circulation duties, and local situations.

Over dues

The problems arising out of books not returned by due date creates a number of problems for the staff. Over due notices have to be sent through mail to such erring borrowers and if books are still not returned personal visits to his address may become necessary. This also depends on the largeness of the borrowing community and the distance between the library and the borrower's work place or house.

Public libraries have the duty 'of encouraging both adults and children to make full use of the library service', and to achieve this objective libraries undertake a variety of extension activities.

Some large libraries have mail service facility for borrowing books. In metropolitan agglomerations where parking of vehicles are a problem, the borrower telephones the library for a particular book or books and they are shelved near a place outside the library. The borrower drives in and returns the books borrowed earlier and borrows the next set of books kept outside thus avoiding the parking problems. In West Bengal, the rural libraries have a house to house service where a 'cycle peon' carries books to members of the library.

14.2.1 Interlibrary Cooperation

Though there are many kinds of cooperative activities developed for providing better services to readers like cooperative acquisition, cataloguing, and storage of library materials, interlibrary loan is an essential part of the cooperative effort.

A national interlibrary loan code was adopted in the United States in 1926 and has been revised a number of times to suit the needs of the day. The Indian Association of Special Libraries and Information Centres (IASLIC) drafted a model interlibrary loan code in the mid 1960s and circulated the same to a large number of libraries with a request to implement the same and to comment on it after a period of time. One of the national seminars discussed the

topic in detail and now most of the libraries in the country are following the same with minor modifications to suit local needs.

Developments in photocopying facilities have changed the interlibrary lending practice through the provision of photocopies.

In a large public library system a member can borrow a book from any of its branches and also use the services provided by them. Locating a book available in a library and borrowing the same through an effective interlibrary loan service becomes simple and effortless when all the libraries in a system create a union catalogue of their holdings.

14.3 READING ROOM SERVICES

Libraries form a vital part of the world's system of education and information storage and retrieval. The contents of libraries have changed so much in the last one hundred years that in addition to a large collection of books, libraries possess a wide variety of other material that inform, educate, and entertain. These include newspapers, magazines, pamphlets, disc and cassette tape recordings, films and videos, photographs, micro reproductions, maps and prints, computerised databases and paintings. Added to this are special collection of materials for special groups of users, like the blind, old, children, illiterates, etc.

The main activity of the reading rooms manifests itself in the actual handing out of the resources of the library to readers. Though open access helps the reader to locate his books of interest, the staff helps to locate books of peripheral and inter- disciplinary subjects. The range extends from merely handing over a book to the casual reader, to systematic servicing of material to the serious scholar.

The rules and regulations for the use of the reading rooms should spell out the opening hours of the library, the holidays for the year, age restrictions, which should be relaxable at the discretion of the librarian, tickets issued for reading rooms' usage, and other necessary rules to suit local needs.

Prompt supply of books to readers depends on meticulous organisation and arrangement, good and up-to-date catalogues, and the deployment of an intelligent and trained staff.

A total stock of the library depends on financial, physical, and human resources and other factors: where a rural library functioning from one room may have a very small number of books catering to its immediate neighbourhood, a large library may possess lakhs of books, all departmentalised according to readers' needs and administrative convenience. Though open access is the order of the day quite a group of materials are held in closed access. They include rare books, maps and prints, special collections on art, private collections, and the like.

Study facilities are provided in the form of ergonomically designed chairs and tables convenient for long hours' of study, study carrels, listening booths, viewing areas, and other aids.

Newspapers

Local newspapers and a few well known newspapers of the country and from abroad — funds permitting — advocating different political opinions to expose impartiality should be provided. The newspaper reading area should be as near the entry and exit point as possible so that the users who come to read only newspapers do not walk around other reading areas.

Periodicals

Though the library may subscribe to a large number of periodicals, all of them cannot be displayed. Arrangements should be made to display those of the periodicals which are constantly on demand and arrange the others in some convenient manner so that they may be supplied on demand. However, in cases of both newspapers and periodicals information should be readily available with the staff looking after these areas regarding the number and titles of newspapers and periodicals subscribed and the old volumes held in the stack rooms.

The readers using the reading rooms for consultation of books should be asked to leave the books on reading tables so that they may be shelved back properly by the library staff. Shelf

reading must be undertaken regularly and all the members of staff should participate in the exercise, thus giving them an opportunity to know more about their library's collection.

It often happens that some readers would like to read the book or books they have taken out from the shelves — either on their own or with the assistance of reference library's staff — for more than one day. In such cases arrangements must be made to 'keep out' such titles at a separate place and as and when they call on the library the next time they may be served faster. The books should be 'kept out' only for a stipulated period and then have to go back to the shelves.

In large reading areas staff should be deployed both to help the readers and as a watch on the materials being used by readers.

The library's role of making reading and other material available to its users ranks among the most important contributions ever made to society. Ideas, knowledge and experiences pass on from generation to generation through library services. Without this line of communication, educational, cultural, social and technological developments would not have been as advanced as they are to day. The services help a reader to find his needs for education and recreation, a student to carry out his studies, and a professional to rely on materials for his work. For a majority of people the library is a place from where to get material for leisure time activities. Reading books, watching films, listening to music, participating in discussions, researching for a paper or a book can all be taken care of by the public library services. The faculty for making desirable concepts, previously unseen or unknown a reality is achieved in a library owing to the browsing facilities offered. This detail termed serendipity arouses interests in reading which could be a life long experience.

The reading room in a small library or a set of reading rooms in large libraries all have only one goal — encouraging the individual to be a good citizen in the society.

14.3.1 Photocopying Services

Photocopying is a form of making copies of parts of books, journals, newspapers, and pamphlets and the like. The practice is a very valuable aid to the library user. For example, people doing extensive the work on a project may need material from parts of many books, journals and newspapers. They can get copies of the information they need from each document. Thus, they have permanent possession of the material they need in form much reduced from the bulk of dozens of documents.

Of course, copyright laws regulate the reproduction of published material by photocopying. Copyright is the exclusive right to publish, reproduce, and sell a literary or artistic work. The laws provide for some photocopying by libraries for their users without permission from or payment to the holder of the copyright.

Besides photocopying services libraries provide microfilm and microfiche services. Some of the old run of periodicals in microfilm or microfiche form which are available in the commercial market are held by the libraries. The readers can either read the material using the 'readers' or get prints of the pages they need.

Microform is compact, can be indexed easily, allows inexpensive transfer of information from the printed format and is economical to duplicate. Microfilm cameras can capture large masses of information, store it cheaply, and retrieve it on demand. Microfilms could be used to save shelf space in the library stacks. Rare books and expensive material, which are easily damaged by constant use in the library, may be microfilmed and only these copies could be made available to readers.

Self Check Exercises

- 1) What types of services are generally offered by the public library?
- 2) What should be the objectives for choosing a charging system?
- 3) Identify the characteristics of a good charging system.
- 4) What do you understand by the term interlibrary loan?

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

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

.....

.....

.....

.....

.....

.....

.....

14.4 REFERENCE SERVICES

Notwithstanding the fact that the home lending services' efficiency builds up the reputation of small and medium sized libraries, public opinion eventually rests on the standard of service in the reference departments, especially in large public libraries. Reference service is providing personal assistance to individual library users in search of a specific piece of information. This service begins with a well-designed contact of readers, books and library staff.

Teaching people about how to use library resources (which is a first step) will go a long way in leading a person to self-service.

Speedy and accurate provision of information, usually in response to specific requests is the primary service of the library. One of the most difficult tasks is often to get the inquirer to state exactly and specifically what he needs to know. Having identified the query properly the reference librarian goes through specially prepared reference sources on current information like directories, almanacs, yearbooks, dictionaries, encyclopedias etc. and also now databases assist the reader. This is known as short range or ready reference service. The query may be by a letter, or telephone, or in person. The library's reference department houses such material, which are not lent out and will, therefore, always be available in the library so that inquirers get their needed information speedily.

The long range reference service necessitates ferreting out the information through a long search in different books, periodicals, and other published material and bibliographical aids on the subject, indexing and abstracting services on the topic if available in the library and even drawing help from other libraries in the neighbourhood, or in the country or even outside the country and also from 'information gatekeepers'. Now a days databases are searched for this service whatever the mode of service, the source of information should be recorded in standard cards and filed, suitably indexed, for future reference.

The pressures of modern society keeps an individual on his toes always and he tries to overcome this by acquiring necessary information as is needed by him at that point of time and the library's reference service plays a large role in his endeavour.

Large libraries in their reference departments employ or take help from subject specialists.

When a library cannot serve the information/book/document needed by an inquirer from its own resources. The request is forwarded to another institution, which is likely to possess the information/book/document. Such service is commonly known as referral service. This stresses the fact that the librarian acts to link the library user with an information resource outside the library. Public libraries by their very nature — a large and heterogeneous clientele and limited resources, however big the library may be - are particularly well suited to such services.

While handling reference queries it is essential to fathom out how much information has to be furnished. Providing more information than is needed by an inquirer is as much a disservice as providing too little information.

Reference service failures should be noted down clearly and discussed at meetings, seminars and conferences so that remedial measures may be taken in future.

The dictionary meaning of the word 'refer' is 'to direct for information or any thing required' and reference is an act of referring. A source, which is consulted for information on a topic, a theme, an event, a personality, a time, a place, or a word, is a reference source. Since the documents in a library is selected, organised, and arranged in a scientific manner the entire library becomes a reference collection. However, some books are planned and compiled or written to be consulted for specific items of information rather than reading through from the beginning to the end. They are called reference books. The librarian handles his reference service primarily with the aid of these books. Service rendered by analysing the query and finding the required answer and handing it over to the inquirer is reference service. Reference departments and their collections are usually located in very prominent locations in libraries so that users can easily find them. The reference resources available to users have an impact on how the users perceive the entire library.

14.5 BIBLIOGRAPHICAL SERVICES

Large public libraries with a huge stock and a large number of professional staff often receive requests from their clientele for assistance in their quest for critical and exhaustive investigation of a subject. They not only seek the help of a library for books and other information on that subject but also request the library for an exhaustive bibliography.

Bibliography as a term has more than one definition. For the purpose of this unit the term may be defined as a name given to a list of books, manuscripts, and other publications, systematically described and arranged which have some relationship to each other. The author bibliography lists all the works by and about one author while a subject bibliography is restricted to one subject or to one subject field.

A bibliography may be complete and comprehensive including all work of a particular kind, or it may be selective, containing only a part of the work. It may be descriptive, having only a brief descriptive note (annotation); it may be evaluative, that is, with critical comment; or it may be both descriptive and evaluative.

Public libraries furnish bibliographies to their readers on specific request and some times the libraries themselves compile bibliographies keeping in mind a potential user. Bibliographies are useful sources in any search on a subject as :

- they locate material on the subject in question;
- they provide a means of verifying such items as author's name, complete title of work, place of publication, publisher, date of publication, edition and number of pages;
- if they are annotated, they indicate the scope of the subject and the manner in which it is treated; if the annotation is critical and evaluative, it comments upon the usefulness of the publication;
- they point out material, including parts of books, which cannot be analysed in the card catalogue; and
- they group works according to form, location and period.

In addition to the compilation of bibliographies public libraries often compile a list of new additions to the library, Article Alert — a select list of articles appearing in current periodicals, and annotated lists of material exhibited during exhibitions. Such bibliographies can be highly useful to regular borrowers and readers.

Self-Check Exercises

- 5) Distinguish between a short range and a long range reference service.
- 6) What is a referral service?
- 7) Why are bibliographies useful in any search on a subject?

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

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

.....

.....

.....

.....

.....

.....

14.6 IT BASED SERVICES

Each year, more and more information becomes available about every subject that interests the library interest users. The present era of information technology opens up a wide range of facilities for the libraries. The services of a library can be profitably improved from the use of technology and the following benefits can be derived:

- routine and repetitive jobs are handled with saving in staff time and removing drudgery,
- speed in work; and thus
- improving productivity,
- the highly debated 'resource sharing' could become a reality, and finally
- universal bibliographic control and as a follow-up universal availability of publications would be attainable.

Some of the areas in the library operations, which can profitably use the technology, are:

- Circulation services;
 - registration of members;
 - charging and discharging of documents;
 - updating the record file;
 - preparation of reminders; and
 - maintaining statistics;
- Bibliography, Documentation and Information Retrieval;
 - Indexing of micro and macro documents;
 - thesaurus construction;
 - abstracting work;
 - compilation of union catalogues;
 - bibliographical work; and
 - searching of users' queries.

The technology will not only help in compiling bibliographies but will also be useful in providing

CAS (Current Awareness Services) and SDI (Selective Dissemination of Information) services. If, at the time of processing documents, standardised subject headings are provided, subject bibliographies can be prepared and printed with ease. Article Alert — a compilation of abstracts of articles appearing in periodicals acquired by the library can be prepared at regular intervals.

The National Informatics Centre under the Planning Commission, Government of India, is responsible for the establishment and development of the computerised information system for planning in India. To accomplish this goal NIC has built a computer network (NICNET) connecting all state and union territory capitals and further reaching out to all the district headquarters. The linkages have been set aside for the specific purpose to cover sectors such as agriculture, education, health and rural development among other areas which are very important subjects where sharing of information will be to everyone's advantage.

The State Central Libraries and at a later stage the district level libraries should get linkages to NICNET for the benefit of the library users.

In an effort to provide more and better library services, public libraries are developing library systems. These are cooperative efforts in which a number of local libraries participate. The resources of all libraries in a system are available to member libraries. Access to these resources will be readily available by means of computers, telefacsimile, and other forms of communications technology.

Some libraries in the western world have replaced the card catalogues by computer based catalogues called On-line Public Access Catalogues (OPAC). Other advanced systems combine computers, television, and telephones and make it possible for libraries to offer various services. To be effective, the libraries in a network or system must be linked together by communication links. These links speed up the sending of questions and receiving answers about the availability of a document or information on a specific topic. Through the use of computers, facsimile transmission, and other communication aids a person in a library will have quick access to a large mass of information. If a library can have computer access to the many databases available in the world they can be searched without any effort. The information sought and answers given are the same but in a different format.

Selection of a computer system is a complex and challenging process. The advance in technology is improving the existing systems very rapidly and every now and then newer and newer hardware and software are coming in the market. But a methodical approach in determining what the system is intended to do and what available systems can meet these requirements will make the process simpler. However, the more we acquire technologies the more we need to provide assistance, mediation, instruction, and analysis.

14.7 COMMUNITY INFORMATION SERVICES

Community information services are those services, which assist individuals and groups with daily problem-solving and with participation in the democratic process. The public library has a major role to play as a community information centre to the user community in socio-economic development at all levels particularly in areas of decision making, problem-solving, economic productivity, health care, continuing education etc. The services concentrate on the needs of those who do not have ready access to other sources of assistance and on the most important problems that people have to face - problems to do with their jobs, their homes and their rights.

The public library is assuming a role of increasing importance as a depository of community oriented information. The growing public interest in the performance and accountability of local, municipal, district, state and central governments and other public utility services has led the general public to know and exercise their rights and privileges. Community information is available in the following forms:

- commercially produced books,
- government publications - local, state and central,
- books/booklets/pamphlets issued by NGOs,
- periodicals,
- audio-visual material,
- multimedia packs, and
- video text.

These materials deal with topics on employment, social security, consumer protection service, housing, insurance — death, accident, fire etc., legal problems and the like which have a direct bearing on people's lives.

The public library, by virtue of its location and longer opening hours is in a unique position to disseminate this kind of information. In a rural setting the printed or written material of local interest has special appeal to the people of that locality. In addition to such literature pictures, photographs, news clippings, reports, articles and other accounts of surveys, studies, etc. about the progress of developmental programmes and other problems of the area will be of great interest for the community.

The provision of not only books and pamphlets but also the provision of film shows, organising camps, exhibitions, lectures, etc. in the library assists individuals and groups who can play an important role in the implementation of programmes on national development such as health care, nutrition, agriculture, social welfare, eradication of illiteracy, small scale industries etc. The Kerala Granthasala Sangham has started agricultural book corners in public libraries in Kerala. This section provides books related to new agricultural techniques and pamphlets produced by agricultural universities, and government departments. In addition, persons interested in this area are exposed to radio talks, TV shows and other print media thus assisting them to better and improved agricultural produce.

Similarly for other economical developmental purposes libraries provide assistance in the form of information about employment opportunities and information about loans for self-employment programmes. Lack of information relating to many welfare programmes for the rural poor can be mitigated by proper community information services.

Ignorance of and insensibility to political situation is a bane of the society. A library is a vital part of the world's systems of education and information, and it can play an effective role in creating more political consciousness in the community. Libraries are potential instruments of social change.

The one major advantage that the public libraries have over other departments is that the libraries are in close contact with the whole of the neighbourhood. Many libraries reach out to the local community by providing community information services, often in conjunction with a local service agency.

In a country like India where library rate is still low, the public libraries may play a vital role. For example in a public library at the village and block level the provision of television, or discussion/lecture on the solving of problems faced by the local people, say farmers, artisans etc becomes an important activity.

Self-Check Exercises

- 8) Identify some of the areas in library service where IT is helpful.
- 9) Mention some of the forms in which community information is available.

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

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

14.8 CHILDREN'S SERVICES

Children's library services are offered as a part of the free public library service. Perhaps the most rewarding activity in terms of job-satisfaction for library staff and a long-term benefit to library service is to work at the children's library. A good children's librarian makes a children's library an exciting place. The librarian's friendliness, understanding attitude can make the children's library — which may be a section of a public library or an independent unit — very interesting. With desks, chairs, shelves at convenient heights for children and with pictures and other decor the place looks cheerful and bright. A black board lined with a wall encourages children to draw pictures.

Inculcation of library consciousness at an early age is an investment for the future. In spite of so many promises made by the government, both at the centre and the states, there are still many children who are brought up with no books of their own. The public library through its children's library has a duty not only to present its services to children but also to introduce them to books and other media. The library encourages them in fluency and comprehension in reading and reading along side with other children in the library will help in-group activities later in life.

Children's libraries offer the following services:

- borrowing facilities,
- reading room facilities for books to be read on the library premises,
- reference material to answer specific queries, to help in study and home work, and to
- learn the use of library material for betterment in life.
- Organisation of educative competitions, quizzes etc. to make well important.

Rules should be framed to ensure that whatever facilities are available should be of the maximum benefit to the largest number of children; and the rules should be as few and as simple as possible.

Good and attractive books should be acquired and children should be allowed to handle them and get them issued. After all, an important part of children's library work is in promoting and developing the reading habit. By handling books children learn how to turn the pages and experience the joy and delight of discovering a new picture.

Children's libraries conduct a wide range of activities, both inside and outside the library, to help children enjoy themselves and develop an interest in the library and its materials. These include story hours, developing a picture collection, arranging children's book week, holiday clubs, parent-teacher programmes, competitions, talks, exhibitions, and similar activities designed to attract, educate, and inspire children of all ages.

Story hours: Story hours, when properly planned with a good story teller, are one of the most popular activities and one of the easiest to arrange, and will be the better introduction of children to books which will encourage them to read more books on their own.

The story hour is a training ground for the child to sit down quietly and listen to some one else, in this case the storyteller. It trains the child to work out a process in its own mind to understand the meanings of the words spoken by the storyteller. It is also a social training, where a group of children sit together, to develop interpersonal relationship.

Picture collection: collecting and mounting of pictures illustrating every subject is of interest to the child, and grouping them in a useful order and issuing them is another activity of the library. It is a never-ending job and efforts should make for an optimum size collection of pictures. Selection of pictures is of prime importance with emphasis on coloured illustrations.

Children's book week : This is a very satisfying and enriching activity which has to be organised in conjunction with the school authorities, authors of children's books, illustrators of children's material, and parents. Both the book week and book exhibition should be held together either at the library's premises or outside the library. In the latter situation the library gets good publicity.

Talks, lectures and film shows are other activities, which excited and aroused interest to read more widely. Competitions, quizzes, reading programmes introduce children to conventional reference books.

Some library managements provide books supporting and reinforcing the school library's collections. In such situations the school and library authorities should work together so that the links of this nature can do more to encourage the non-library user to join the children's library and to take advantage of the facilities it offers.

Libraries can have a magazine where children are encouraged to write.

To prepare oneself intellectually for a mature life, education is indispensable. Education rests on four pillars: 'learning to know, learning to do, learning to be, and learning to live together'. Reading is central to all four.

14.9 EXTENSION SERVICES

In L M Harrods's *The Librarian's Glossary* the term extension work is defined as 'activities which are undertaken with the object of reaching groups of people who might otherwise be unaware of the library', by different extension activities.

The UNESCO Manifesto of 1994 states that 'the public library should be active and positive in its policy and a dynamic part of community life. It should not tell people what to think but it should help them to decide what to think about. The spotlight should be thrown on significant issues by exhibitions, book-lists, discussions, lectures, courses, films and individual reading guidance. Reading interests should be stimulated and the library's service publicised through a well-planned public relations programme'.

Publicity begins with a good reader service that is broadcast by word of mouth. Just as a seller must look for new marketplaces for his goods and bring awareness for his products, so must the public library stimulate a need for its materials and find new users for its various services.

Extension activities will vary in nature and in scope from library to library depending on financial, physical, and human resources. The main objective is to bring the library and the community close to each other.

A community profile will help to organise extension activities so that local needs are met and desires fulfilled. Linking the services of the library with various other social, cultural and educational organisations will not only make the library more of a focal point within the community, the facilities and services offered strengthen the informational role of the library but also benefit from sharing common information sources.

Some of the important extension activities of the public library are given in the next few pages.

14.9.1 Branch Libraries

An important and a major role of the public library is to make its services available to everyone in the area. Branch libraries help spread public library service which serve the smaller and more scattered communities away from city centres. While there are branches which operate from one room in an institution or a market complex, some branches have their own building, staff and a large collection with all types of services. They are open full time and have access to the stocks of other branches as well as to the stock of the central library. This enables a group of libraries to share information material, and services. This indirectly helps participating libraries organize their collections and plan improved services. To facilitate this work and to be effective the libraries must be linked together by communication links. These links accelerate the sending of questions and answers about the availability of books and other materials and can also deal with readers' subject requests and to provide bibliographic information either first hand or speedily enough through other branch libraries. By means of inter-library loans and similar reciprocal borrowing privileges among libraries and through use of micro-reproductions, computers, facsimile transmission, and other communication aids, a person using a particular library will have quick access to a very large collection of recorded information.

14.9.2 Bookmobiles

The public library movement has been characterised by a missionary zeal to extend the benefits of library service to increasing numbers of the community. This extension has been achieved, among other things, by the use of bookmobiles.

Among the many services of a library, the mobile library, the library on wheels, bibliobus, travelling library or book mobile as it is variously called, has caught the public imagination most among the library's extension activities.

Bookmobiles serve to bring the library very close to the entire community it serves. The main purpose of organising a library on wheels is to get over the problem of erecting a suitable building and employing adequate staff to run the services. It is used as a means of offering a book service to scattered rural communities. In densely populated metropolitan agglomerations it is more economical to provide mobile library services operating from the city central libraries.

The book mobile is a specially constructed van mounted on a truck chassis and equipped with book shelves. The library is stocked with a collection of materials selected to meet the various interests of users. It is provided with the facilities to lend them to the people at every stoppage for a fixed duration of time according to a pre-arranged schedule of timings. This will serve the purpose of a lending this library.

"Mobile libraries need careful planning so that maximum number of books can be safely stocked - because of varying weather conditions — and displayed. A small number of reference books may be included in the collection, which may be used by the people near the mobile library during its stoppage. While only limited reference service can be rendered directly, the book mobile librarian may take questions or requests for specific books back to the city central library so that the readers' requests are answered during the bookmobile's next visit to the place.

Access to the vehicle must be made unconstrained for young and old. Stoppages must be suitably situated and sited and full publicity must be given to the bookmobile's regular programme. The large stock of the city central library will enable necessary frequent changes of the bookmobile's book stock.

The frequency of visits of the bookmobiles to various stoppages or distribution centres depends on a number of conditions such as the roads leading to distribution centres, weather conditions, and the number of readers to be served.

The bookmobiles continue to be a welcome and regular feature in the lives of many people who otherwise would not be able to enjoy the benefits of a library.

14.9.3 Services for the Illiterates

Illiteracy is a bane of society. A very large percentage of our population is illiterate and suffers from a lot of disadvantages. They are incapable of such basic things like reading or writing a letter or a notice and are unable to identify the destination boards on public transport or handle even a small financial transaction in banks or other places. As such he remains a loser all his life. A person is ignorant because he is poor and is poor because he is ignorant. Literacy can break this vicious circle and public libraries can play a very major role in eradicating illiteracy.

Linking the public library services with the objectives of the National Literacy Mission's efforts could be made to bring in those children who cannot attend formal schools because of economic or family compulsions to the library. Suitable material like elementary readers, how-to-do-it books, books with good illustrations, audio-visual material, sound recordings and the like should be made available to them. The same material could be used for the use of adult illiterates.

Post literacy programmes should be conducted to prevent them from lapsing into illiteracy.

Continuing education or opportunities made available to embark in a life long learning experience will more than adequately compensate for not undergoing a formal education. For adult learners this will be a second chance and will ensure an uninterrupted growth in improving their quality of life.

Unlike in a formal system of institutionalised education, continuing education provides learners with the capacity to handle the structural weaknesses in the society. In continuing education, with the support base of public library services, it is the individual who sets and pursues the learning objectives and the resultant goals and not that the system is enforced upon him.

14.9.4 Young Adults Services

Public library rules usually permit persons above the age of eighteen to become members; children's libraries restrict the upper age limit to twelve years. To bridge the gap of twelve plus and eighteen, American public libraries made a beginning of developing a young adults department with a collection of books and other materials based on the proposition that these difficult years need special attention at this critical transitional stage. This is also an attempt to minimise loss in readership normal to this age group. The impressions gained at this age are not easily eradicated, and many young adults may be lost to the public library for good unless a more realistic policy is pursued.

Such libraries have now been set up in Europe also.

Young adult departments feature materials on careers, sports, travel, and other subjects of interest to teenagers. Librarians in young adult department guide users to suitable books in the library's other departments when necessary and also conduct programmes to encourage library use.

Some library management are in favour of the idea of a multipurpose library to meet the needs of a children's library, school library and young adults library with a natural progression to the adult library.

14.9.5 Services for Adult Learners

After the end of the First World War, the public librarians in the Western world felt that their libraries had failed to act as a vital communication centre for a large percentage of the community and started remedial measures. One of the special groups they targeted was the adult learner who because of the exigencies of the situation could not attend a formal higher educational set-up. The management of the public libraries started taking steps to transform the public library into a 'people's university'.

What adults learn today or fail to learn today determines their tomorrow. He is always in a dilemma whether to learn or not to learn. A public library, whose services are available to all, can open up opportunities for him to learn and continue to learn according to his tastes and capabilities so that he can take care of his present day responsibilities and be prepared to achieve the desired promises. The present day complexities in life because of exciting working practices, increasing living standards, and increased leisure time requirements have made him realise his educational inadequacies. The public library has always served as a learning resource centre for non-traditional or extra-curricular study.

While the systematised learning in a high school or a university may become dull and appear to be forced, the self-learning experience is pleasurable. As such the public library could be the primary public agency, which could contribute positively to this learning process.

Allen Tough in his work *The Adult's Learning Projects* says that 'the adult's highly deliberate efforts to learn provide an excellent starting point for developing better competence and help in adult learning'.

The mature adult with the basic understanding of the three Rs. can study on his own either for personal enjoyment or to prepare himself for further education. Accompanied by careful library guidance a good general background in a chosen subject area could be accomplished.

The library could be an open learning centre and in this free atmosphere, devoid of any classroom constraints, learning could become personal, familiar and pleasurable.

The library can house suitable material for this group. In our country, the libraries may stock the publications of the Open Schools, Universities and National Informatics Centre's data. This will help many adults who are currently involved in independent study to further their formal education for the betterment of their personal lives and to improve their economic conditions.

14.9.6 Services for Senior Citizens

The ethics of social service and professional practice justifies library service to special categories of readers like senior citizens. Libraries are paying increasing attention to their needs. Many people nearing retirement turn to a library for help in planning their future. They seek information on such subjects as recreation, handling finances, health and other old age related problems. Some libraries make space available for them to sit around and discuss their problems and interest. Some libraries make books in large print available to people with failing eye-sight. In special cases, some libraries send books and other material to them when they are unable to come to the library premises.

14.9.7 Services for People with Disabilities

People with disabilities all over the world are starved of facilities and services. They are the least nourished, least educated and least employed. It is estimated that 16.15 million of Indian children are affected by one or other disability (National Sample Survey Organisation, 1991) and not even one percent of them go to school. Unless they are appropriately educated they cannot aspire for good living. Though the *Persons with Disabilities Act, 1995* envisages provision of free education to children with disabilities in an appropriate environment, later integrating them in normal educational institutions and designing schemes and programmes for non-formal education and setting up open schools and open universities. However not much progress has been made in our country.

The blind persons are the most disadvantaged and are cut off from full participation in the society because of their misfortune, which can be minimised to a great degree by extending library services to them. Helen Keller during her deposition before the US Congress Library Committee in 1930 said that 'books are the eyes of the blind. They reveal to us the glories of the light-filled world; they keep us in touch with what people are thinking and doing; they help us forget our limitations'.

(Koestler : 1976). Although somewhat lightened by the greater availability of radio, Keller's statement on the importance of books to the blind is still applicable to-day. Books for the sighted echo the reader's own experience whereas for the blind it is an important form of information intake.

Present day governments in many countries have taken upon themselves the responsibility of providing access to information in the form of Braille books and talking books (recordings of books and articles) to the blind. The process of producing and disseminating these books is seen as an obligation towards the blind who cannot read ordinary print because of a handicap.

In our country the Braille Press at Dehradun, which is run by the Government of India produces Braille books and our government has accorded sanction to transmit these books by post free of cost. A number of institutions also produce Braille books.

Some public libraries have a big collection of Braille Books and have separate reading rooms for the blind and the staff are trained to assist the blind readers in their use of Braille books and talking books.

Hospital Libraries: Illness forces a person to go to a hospital and while staying at the hospital as an indoor patient he is completely cut off from community life. Public libraries with adequate budget and staff allocate some of their resources to the provision of a service to those in hospitals.

If the patient has to stay in a hospital for long periods the extended enforced absence from the community is more pronounced when he is otherwise permitted to read and this creates the need for some substitute and books can be the ideal companion to the patient. He can absorb himself in a book and temporarily forget his illness. In convalescence boredom is a serious threat to recovery and what better blessing than a good book to suit his reading taste?

Some public libraries run a hospital library service as part of their extension activities and there is every likelihood of the patient after recovery becoming a regular reader in the neighbourhood library.

Hospital libraries should have well chosen books as a mental relaxation or stimulus in the case of a long and trying illness. Medical science also attaches great importance to the patient's tranquility of mind and books have a very important role to play in that context.

14.9.8 Prison Libraries

Prison is a building for the confinement of persons held while awaiting trial and for persons sentenced after conviction. While enforced discipline must be according to the existing laws, a major part of the work in prison should be of a remedial nature to reform the prisoners.

By making arrangements for the prisoner to read books, not only is his boredom is reduced but also his temptation to join hardened criminals is lessened. Forced to live their lives away from families and friends in general and from their regular work schedule in particular they long for a normal way of life which they cannot follow.

Books suited for reforming them should be provided. 'How-to-do-it' books will go a long way for them to lead a normal life after their prison terms.

Tihar jail in Delhi has a library, which is a branch library of the Delhi Public Library system.

Library as a social institution is principally connected with people first and secondarily with books. People are the target at which library services are aimed and the prison library will be an ideal social institution.

14.9.9 Other Activities

Some of the other extension activities are lectures in libraries or in a community hall, schools, colleges and local organisations where the library staff talk on the services provided by the library.

Bulletin boards, window displays and displays inside the library when done skillfully are invaluable. Deposit stations, which hold a small collection of books from the central library, deposited with some set-up other than the library like a factory, club, society or institution will help people who attend those places. The books can be periodically changed.

Other activities include consumer advisory services, citizen's advice bureaux, tourist information centres, career counselling offices, group discussions, music concerts, cultural exhibits, film societies and field trips to book fairs, museums.

Self Check Exercises

- 10) What services do children's libraries offer?
- 11) Mention some of the extension activities a library undertakes.

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

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

.....

.....

.....

.....

.....

.....

14.10 SUMMARY

Notwithstanding the fact that all types and kinds of services detailed in the Unit are highly desirable but hardly attainable, there should be some areas where the library management should lay its priorities.

Accessibility plays an important role in offering library services, which in turn depends on a number of different factors. They include the physical location of the library in the community, the approach to the library, building, opening hours of library, telecommunication links, the rules and regulations of the library all having a direct bearing on the services.

In a rapidly changing and highly competitive world access to data, information, and knowledge is recognised as an important attribute. The only access for these is through the public library. The library plays a major role as a multipurpose agency for education, recreation, information and culture.

Irrespective of the fact that the library possessing adequate physical, financial, and human resources, the services the library renders, which alone deserve importance and consideration, is of utmost importance while evaluating its success as a public service. The management should have constant review consciousness so that policy decisions can be taken and moderated regarding the range and quality of services keeping in mind the continually changing community profiles.

14.11 ANSWERS TO SELF CHECK EXERCISES

- 1) The services include organizing materials for ease of access and convenient use through cataloguing, classification, and shelf arrangement; lending procedures that provide an equal opportunity for all patrons to use the materials; guidance to the user in finding materials and using library resources and stimulation of use of materials through publicity, display, reading lists, story hours, book and film discussions, and planned reading programmes. Other services include providing information services, both to persons who come to the library and to those who telephone (or write a letter); giving assistance to cultural, civic, and educational organizations in finding and using materials; sponsoring cultural programmes in the library for children, young people, and adults; collecting special materials of interest to the community; borrowing materials on interlibrary loan; making computer searches; extending library services to all points of the community through branches, deposit stations, and book and book mobiles; organizing the library for easier access and specialized service into subject departments and departments for various age levels; and coordinating the library programme with other educational and cultural services in the community.
- 2) The system should be able to:
 - identify materials loaned out;
 - identify the borrower of a particular item;
 - secure return of the materials, if not returned within a reasonable period after the due date by sending reminders;
 - provide a total number count of all materials charged out;
 - provide facilities to update the records;
 - permit making requested books available to borrowers as well as to readers who want to use the book inside the library premises, as promptly as possible, through an efficient reservation system;
 - to find out where every book is at any given time and being able to conveniently recall any book prior to the due date; and to
 - provide statistical information regarding book usage by category and, if need be, in more detail by individual book.
- 3) The main characteristics of a system should be that:
 - the system must be simple for the public to use and for the library staff to understand and operate with ease and speed;
 - the system must be economical in relation to the total library budget.

- In the case of branch library operations the system must be adaptable to the main library's operations;
 - The system should minimise excessive delay caused by a long queue of borrowers at the circulation desk; and
 - In case of branch library operations, the system should permit return of books anywhere in the library system.
- 4) Inter library loan is a service which provides document circulation to the outside libraries as clientele.
 - 5) A short range reference service is one where the inquirer's questions are answered by consulting specially prepared reference books or books on current information like directories, almanacs, yearbooks, dictionaries, encyclopedias and the like; a long range reference service necessitates ferreting out the information through a long search in different books, periodicals, and other published material and bibliographical aids on the subject, indexing and abstracting services on the topic if available in the library and even drawing help from other libraries in the neighbourhood, or in the country or even outside the country and also from 'information gatekeepers'.
 - 6) When a library cannot serve the information, book, document needed by an inquirer from its own resources the request is forwarded to another institution which is likely to possess the information/book/document. Such service is commonly known as referral service.
 - 7) Bibliographies are useful sources in any search on a subject as they locate material on the subject in question; they provide a means of verifying such items as author's name, complete title of work, place of publication, publisher, date of publication, edition, and number of pages; if they are annotated, they indicate the scope of the subject and the manner in which it is treated; if the annotation is critical and evaluative, it comments upon the usefulness of the publication, they point out material, including parts of books, which cannot be analysed with the card catalogue, and they group works according to form, location, and period.
 - 8) Some of the areas in the library operations which can profitably use the technology are: circulation services which includes registration of members, charging and discharging of documents, updating the record file, preparation of reminders and maintaining statistics; bibliography, documentation and information retrieval services which include indexing micro and macro documents, thesaurus construction, abstracting works, compilation of union catalogues, bibliographical work, and searching and print outs of queries of users.
 - 9) Community information is available in forms such as commercially produced books, government publications — local, state and central, books, booklets and pamphlets issued by NGOs; periodicals, audio-visual material, multimedia packs, and video-text.
 - 10) Children's libraries conduct a wide range of activities, both inside and outside the library e.g., story hours, developing a picture collection, arranging children's books week, holiday clubs, parent-teacher programmes, competitions, talks, exhibitions, quizzes, reading programmes, and producing a magazine where children are encouraged to write.
 - 11) Some of the extension activities are: branch libraries, book mobiles, services for illiterates, young adult services, services for adult learners, services for senior citizens, services for people with disabilities, and prison libraries.

14.12 KEY WORDS

Bar Code

- : A visual code representing alpha-numeric symbols arranged in a series of vertical parallel lines or bars, representing data. A bar-code scanner reads it as digital signals for entry in a computer database. Used in many forms of automated library circulation system.

Braille	: A system of writing or printing for the blind in which combinations of tangible dots or points are used to represent letters, characters, etc., which are read by touch. Louis Braille (1809-1852) was a French teacher of the blind.
Circulation Service	: A library service in which books and other library material are lent out for home reading / use.
Clientele	: Readers and borrowers of the library who make use of its services.
Community Information Service	: Special kinds of information services provided by the library for the community as a whole or for some segment of the community. The information relates to the well being of the community in general and to the individual to handle his day to day needs and problems.
Ergonomics	: The study of the relationship of human beings and machines (for purpose of this unit the library furniture and fittings) especially in terms of physiological, psychological, and technological requirements.
Extension Work	: The provision by a library of materials and services (including advisory services) to individuals and organisations outside its regular service area, especially to an area in which library service is not otherwise available.
Information Resources	: Library materials which are either read or used in the reading room of the library or borrowed for home reading, e.g., books, journals, audio and video cassettes, data bases, maps, photographs, pictures, and the like.
Interlibrary Loan	: Library service which provide document circulation to the outside libraries as clientele.
Multimedia	: Computer systems designed to capture, store, process, retrieve, display and playback multiple types of information: text, picture, sound, animation and/or video. At least two of the components must be present to qualify it as a multimedia product.
OPAC	: On-line Public Catalogue - An automated catalogue system, where the catalogue entries are stored in machine readable form and accessed on-line by the library users employing user friendly software and visual display unit.
Pamphlets	: A non-periodical, ad-hoc, publication of at least five but not more than forty eight pages.
Reference Interview	: That part of reference service wherein the inquirer and the reference librarian interact to make sure of the precision of the inquiry.
Referral Service	: A service which directs inquirers to an appropriate source for the information or data required. Referral may be to libraries and documentation centres, or to appropriate agencies and individuals.
Resource Sharing	: Sharing the resource facilities with one or more libraries either by formal or informal arrangements.
Serendipity:	: The faculty of making desirable discoveries by accident.
Story hour	: A period devoted regularly to the telling or reading of stories to children in the children's department of a public library.

14.13 REFERENCES AND FURTHER READINGS

- Ashburner, E. H. (1986 Reprint). *Modern Public Libraries : Their Planning and Design*. New Delhi: Reliance.
- Barua, B. P. (1986). Public Library Service in India. In: *Handbook of Libraries, Archives, and Information Centres in India*. New Delhi : Information Industry Pub.
- Brown, Royston. (1979). *Public Library Administration*. London: Clive Bingley.
- Campbell, H. C. (1982). *Developing Public Library Systems and Services*. Paris: Unesco.
- Circulation System Selection Manual for Public Libraries. (1961). Chicago: ALA.
- Community Information : What Libraries Can Do. A Consultative Document. (1980). London: The Library Association.
- Cylke, F. C. (ed.). (1979). *Library Services for the Blind and Physically Handicapped*. Munich: K G Saur.
- Davies, D. W. (1974). *Public Libraries as Culture and Social Centers : The Origin of the Concept*.
- Metuchen, N. J. : Scarecrow.
- Dowlin, K. E. (1978). The Technological Setting of the Public Library. In : *The Public Library: Circumstances and Prospects*. Chicago : Univ. of Chicago Press.
- Garrison, Guy. (ed.) (1975). *Total Community Library Service*. Chicago : ALA.
- Gates, J. K. (1979). *Guide to the Use of Books and Libraries*. 4th ed. New York: Mc Graw.
- Gates, J. K. (1990). *Introduction to Librarianship*. 3rd ed. New York: Neal-Schuman.
- Goswami, Inder Mohan. (1955). *Development of Library and Information Science*. New Delhi: Commonwealth Pub.
- Harrison, K. C. (1977). *Library and the Community*. 3rd rev. ed. London: Andre Deutsch.
- Harrison, K. C. (1963). *Public Libraries To-day*. London: Crosby Lockwood.
- Heintze, Ingelborg. (1963). *The Organisation of the Small Public Library*. Paris : UNESCO.
- Jaganayak, S. S. (1997). *Role of Libraries in Socio-economic, Cultural, and Educational Development*. New Delhi : Classical Pub.
- Jefferson, George. (1965). *Public Library Administration*. Bombay : Asia.
- Jolliffe, Harold. (1968). *Public Library Extension Activities*. 2nd ed. London: Library Association.
- Maitra, Satyeh. (Jan 1974). Intamel Meeting: The Public Library and Adult Education in India. *Int. Lib. Rev.* 6(1), pp. 55-60.
- Mc Colvin, L. R. (1937). *Libraries and the Public*. London: Allen.
- Mc Colvin, L. R. (1968). *Public Library Services for Children*. Paris: UNESCO.
- Mittal, R. L. (1964). *Library Administration : Theory and Practice*. Delhi: Metropolitan.
- Mittal, S. R. (1964). *Organising a Village Library*. New Delhi: NCERT.

Murison, W. J. (1988). *The Public Library : Its Origin, Purpose, and Significance*. London : Clive Bingley.

Neelameghan, A. (1988). Public Library and Community Information Services, In : *Seminar on Public Library Services and Information Networks*. Madras : Madras Library Association. pp. 128-136.

Outreach, Conceived and Documented by Lokesh Batra. (1998). New Delhi : National Literacy Mission on behalf of Naval Headquarters.

Pungitore, Verna L. (1989). *Public Librarianship : An Issue Oriented Approach*. London : Aldwych.

Ranganathan, S. R. and Sivaraman, K. M. (1951). *Library Manual*. London: Blunt.

Roy, Colin. ed. (1978). *Library Service to Children : An International Survey*. New York: K G Saur.

Sanyal, Sunanda. (11 Feb. 2000). Learning Skills. In : *Calcutta : The Statesman*.

Shamim Ahmed. (1998). *Computer in Library Management*. New Delhi: A P H Pub.

Stoakley, Roger. (1982). *Presenting the Library Service*. London : Clive Bingley.

Sykes, Paul. (1979). *The Public Library in Perspective*. London: Clive Bingley.

Visvanathan, C. G. (1961). *Public Library Operations and Services*. Bombay: Asia.

Visvanathan, C. G. (1990). *Public Library Organisation*. New Delhi: Ess Pub.

Wallace, S. L. (1953). *Promotion Ideas for Public Libraries*. Chicago : ALA.

Whiteman, Philip. (1986). *Public Libraries Since 1945: The Impact of Mc Colvin Report*. London: Clive Bingley.

Withers, F. N. (1974). *Standards for Public Library Service : An International Survey*. Paris: UNESCO.

World Encyclopedia of Library and Information Science. (1993). 3rd ed. Chicago : ALA:

UNIT 15 APPLICATION OF INFORMATION TECHNOLOGY IN PUBLIC LIBRARY SERVICES

Structure

- 15.0 Objectives
- 15.1 Introduction
- 15.2 Characteristics of a Public Library
- 15.3 Advances in Information Technology
- 15.4 Data Communication Systems
- 15.5 Application of Information Technology (IT) in Public Libraries
- 15.6 Problems in Application of Information Technology
- 15.7 Summary
- 15.8 Answers to Self-Check Exercises
- 15.9 Key Words
- 15.10 References and Further Readings

15.0 OBJECTIVES

After reading this unit you will be able to:

- know the advances in Information Technology;
- recognise the importance of data transmission devices in the context of public libraries; and
- understand the benefits of application of IT in public libraries.

15.1 INTRODUCTION

The UNESCO Public Library Manifesto, 1994 prepared in association with IFLA describes the public library as the local centre of information. It is also described as the local gateway to knowledge providing for lifelong learning, independent decision-making and cultural development of the individual and the social groups. The manifesto proclaims UNESCO's belief in the public library as a living force of education, culture and information. The public library movement has a long history in our country. Prior to Independence, statesmen, social workers, stalwarts, philosophers and library enthusiasts spearheaded public library movement. They have strived to establish libraries to promote literacy, cultural heritage and dissemination of information on various topics of relevance to the general public.

15.2 CHARACTERISTICS OF PUBLIC LIBRARY

Over the years public libraries have been perceived as: a) social agency, b) store house of knowledge, c) referral centre, d) community information centre, e) nodal agency to collect information from all sources, f) promoter of social education, g) provider of repackaged information in the local language, h) a coordinating agency to all information producing bodies. After the 73rd amendment of the constitution in 1992, a three tier Panchayati Raj system has come into existence in India. The Panchayati Raj Bodies were given 29 functions in which the management and maintenances of libraries is identified as one of the functions.

Accordingly, many state governments are making efforts to strengthen the library system at Village, Taluka (Mandal) and District levels.

Services of Public Library

In view of the above developments, it is necessary to redefine the services offered by public libraries at the grass root level. They are to be seen not as passive bystanders in the overall development process but as an institution for ushering in change in the society. The changing scenario demands that public libraries should get reoriented to create awareness about various information sources and provide access to the information of the following types.

- 1) Agricultural information (crops, credit, marketing etc.)
- 2) Health and sanitation information (hospitals, Public Health Centres (PHCs) doctors, blood banks, immunization programmes etc.)
- 3) Education information (school, colleges, courses, vocational programmes, admission procedures etc.)
- 4) Employment information (self employment schemes, opportunities, procedures etc.)
- 5) Socio-economic development information (population, occupation, development programmes, statistics etc.)
- 6) Financial and credit information (banks, cooperatives, subsidies, credit availability etc.)
- 7) Legal information (free legal advice, consumer grievance councils etc.)
- 8) Who-is-who in the locality (officials, non-officials, professionals and other important persons of the locality.)

If all these pieces of information are offered, through varieties of services, then public libraries will play a fundamental role in influencing the collection building, organization, storage, and dissemination of information. Public library services have been discussed in Unit 14 of this Block. As a result, the public library may have to opt for radical departures from the established organizational structure and functional process to satisfy its clientele. Consequently, application of new information technologies to the operation, design and development of information products and improved library services becomes inevitable. Libraries have to take decisions as to what technologies to use, at what cost and the benefits and impact of such a use, to realise the changing focus and assigned role of public libraries in the society.

15.3 ADVANCES IN INFORMATION TECHNOLOGY

Revolutionary changes are taking place in computer and telecommunication technologies by means of which information is transferred, recorded, edited, stored, manipulated and disseminated in the minimum possible time. Developments in the computer hardware and software have made the tasks much easier together with the use of word processing, micrographics, reprographics and video and other storage, retrieval and reproduction devices in a library environment.

Computer Systems

Computer systems comprise of five components:

- 1) **Hardware:** The physical components that can be seen
- 2) **Software:** A sequence of instructions placed into the hardware to execute a task or to solve a problem
- 3) **Networks:** To link computers together so that they can communicate with each other.
- 4) **Database:** The form in which data is stored in the computer systems
- 5) **People:** Who use the computers and design the systems.

If we look at the basic configuration of a computer system, it comprises of input devices, output devices, internal and external storage devices apart from the processor. The detail of some of the input and output devices that are important for libraries are given below.

Input Devices

The input devices accept data and convert data into machine-readable form and transmit data to the processor unit of the computer. There are varieties of different output devices and they comprise of (a) Key Board; (b) OCR reader; (c) Image scanners; (d) Barcode Readers; (e) Voice data entry systems; (f) Mouse; (g) Touch sensitive scanners; (h) Joy sticks; (i) Magnetic Card.

- a) **Key Board:** The keyboard is the most common data entry device. Keyboards are used mainly for (a) entry of data from a source document; (b) inputting commands or search terms in order to interrogate a database; (c) creation and use of graphic; (d) entry of text data as in word processing. Keyboards are widely used in conjunction with a screen to display the data. However, the keyboard is a slow form of data entry and is prone to error.
- b) **OCR Readers:** Optical Character Recognition is a means for deciphering characters, printed on a document. An OCR reader scans the document for reflected light patterns. The patterns are then translated into electric signals, which are passed to the computer store. The OCR readers can recognise a wide range of type fonts and even handwriting. OCR has great potential for text entry and for creation of electronic documents.
- c) **Image Scanners:** A page of text, drawings, and photographs can be directly input into a computer using a scanner. When scanning graphics, the scanner converts the pattern of light and dark images on a page into a series of dots called picture elements of pixels. This can then be stored as binary digits in computer memory and retrieved as required. The key problem is, images occupy a lot of memory. Scanners have different applications including the scanning of photographs and logos in databases and documents. The scanners are available in hand held or desktop versions.
- d) **Barcode Readers:** Barcodes are widely used in libraries and in commercial establishments. Each bar code represents a number. The barcode is a pattern of thick and thin bars divided by thick and thin spaces. Only the relative separations and thickness of the bars are important. Barcode is read either by passing a light-pen or hand held scanner or by passing the bar code over a flatbed scanner. The reading of the bar code records a transaction and information is fed back to a computer database. Barcode systems are easy to operate and have very low error rates. Since the barcode readers are linked to a computer system it is easy to change the details and control transactions, adjust loan periods, update database and indirectly provide management information.
- e) **Voice Data Entry System:** Voice data entry involves the reception of speech via a microphone, conversion of that data into electronic signals for storage. Words when spoken are recognised by a matching technique whereby the computer compares the speech pattern with the stored speech pattern. The closest match is displayed and if it is incorrect the word must be respoken. The computer is only able to recognise sound for which it has stored data. Therefore people must pronounce the word in the same way as in the stored data for successful recognition. Voice data entry is quick, cheap and attractive because it frees the user from using the keyboard. However, there are still difficulties in voice systems in recognising accent and dialects.
- f) **Mouse:** It is a small device with a ball underneath and one or two selection buttons on the top, which moves the cursor or pointer across the screen of the computer. Once the pointer has been appropriately positioned, an item of option may be selected by clicking on the mouse. There are variations in the design of mouse depending upon the portable computers or otherwise. Standard mouse is normally moved on a flat surface besides the screen. A mouse is usually used in conjunction with a keyboard.
- g) **Touch-sensitive screens:** They allow the user to select an item from a screen display by touching it with a finger. The touch breaks the network of horizontal and vertical infra-red beams and thus the touch can be detected. Such screens are becoming popular in various public access environments such as multimedia kiosks, and for breaking the barrier of computer illiteracy.

- h) **Joysticks:** They are widely used in computer games to move the sensor around the screen.
- i) **Magnetic Card:** Magnetic cards are in the form of plastic card in the size of a credit card. Data are encoded in a magnetic strip. These types of cards are used as a means for identification for library users and for bank transactions.

Output devices: Output devices are the means by which computer systems communicate with people, that is, the output devices translate the processed data into a format that is suitable for the people to use. Apart from printers and monitors, multimedia kiosks are available as output devices.

- 1) **Multimedia Kiosks:** are workstation specifically designed for public access. They may be stand alone or networked to a larger computer system. They present information in different media. For example, text, sound, graphics, images and video. The screen is often a touch screen. They are an alternative and interesting means of presenting information having wide applications in advertising, retailing, banking, education and training, provision of information and public access to community information and online catalogues. In a public library environment, they can be used in a variety of ways for display of documents, photographs, objects, newspapers, maps and video apart from information contained in the catalogues. They can also be used as self service terminals thus freeing the staff from routine transaction and to engage in sophisticated information provisions.
- 2) **External storage devices:** A processor of a computer has volatile memory and cannot hold large quantities of data permanently at cheap cost. Hence it is necessary to have secondary, external or backing storage devices. The data on the computer programmes are held in backup store until they are needed and then they are moved into the main store. They are currently only three types of external storages: Magnetic tape, Magnetic disk and Optical disk.

15.4 DATA COMMUNICATION SYSTEMS

Data communication includes data transmission using electrical and optical scanners or electromagnetic waves. Data transmission is done using the telecommunication links. The following are some of the data transmission devices that are useful in the context of public library.

Facsimile transmission (fax)

A Fax machine is connected to a telephone or microcomputer. The document to be communicated is placed on the machine and the recipient's fax number is keyed in. The document is then scanned and converted into digital form. After transmission the original document is reassembled at the other end as an exact copy of Facsimile. The advantage is that text, charts, handwritten documents and drawings can all be transmitted. Fax is also a document delivery option though it may be expensive. Using an inbuilt fax board, a microcomputer allows computer-generated text and graphics to be faxed without a hard copy being generated. The main disadvantage of fax is only its slowness of conversion and distortion in image transfer at times.

Videotext

Videotext uses a modified television set to present textual and graphic information directly to the end user. Videotext systems also use telephone lines to establish a two way link. It is generally used for information dissemination to the general public on current affairs, sports, weather forecasts, financial data, traffic reports and television programmes. Broadcast systems are known as teletext.

Electronic mail (e-mail)

E-mail allows messages to be sent over telecommunications network from one computer to another without any use of paper. An e-mail system may be a local system that delivers

messages using a Local Area Network (LAN) or a national or international system using the telecommunications network like Internet. The main advantage of e-mail is that messages may be sent and received by the computer whether or not the recipient is available. The recipient may read the message at his/her convenience.

Videoconference

Video conferencing combines a Teleconference with a video (Television) conference link so that the participants can see each other and view presentations. This technology could potentially change the way people communicate, interact and take decisions without actually, physically meeting. However, the cost of video conferencing is very high. But the potential for Distance Education and for Community Information Dissemination and for demonstration of a technique through a practice, video conferencing is very effective.

Internet

Internet is a world wide network of computers. Access to Internet is channeled through the high-speed links provided by Internet Service Providers (ISPs). Technically anyone with a personnel computer, telephone line and a modem can access Internet. The connectivity depends on the sophistication of the telephone system. Internet enables access to huge amount of electronic data stored in computers of different institutions wherever they are. Internet connection enables one to join a global community of several million users for communication 'live' or by sending e-mail messages. Through websites of the institutions, it is possible to know about their activities, expertise, publications, and library resources besides opening up of enormous possibilities. All these developments are changing the way we collect information, store, organize and disseminate.

Self Check Exercises

- 1) Explain briefly the services of public libraries expected in a changing scenario.
- 2) State the basic components of a computerized library system.
- 3) What do you mean by Data Communication? What are the mechanisms used for provision of services in the context of public libraries?

- Note:**
- i) Write your answers in the space given below.
 - ii) Check your answers with the answers given at the end of this unit.

.....

.....

.....

.....

.....

.....

15.5 APPLICATION OF INFORMATION TECHNOLOGY (IT) IN PUBLIC LIBRARIES

The main reasons why libraries seek the application of IT solutions are to:

- obtain increased operational efficiencies
- relieve professional staff from clerical chores so that they are available more for user services.
- improve the quality of services
- provide new services not hitherto possible
- improve the management of all types of resources

- facilitate wider access to information for their clients
- facilitate wider dissemination of their information products and services
- enable their participation in resource sharing through library networks; and
- enable rapid communication with other libraries and professional peers.

The above-mentioned reasons are not mutually exclusive. The library may begin with one application and reaping benefits there from may extend to other useful areas.

House keeping procedures

In any public library, the following activities, which are classified as house keeping operations, are undertaken using computer. House keeping procedures in a library are those routines or tasks that are required for everyday management and functioning on the library. They are broadly:

- i) Acquisition
- ii) Cataloguing
- iii) Circulation control; and
- iv) Serials control

Most of the above operations in the library are inter-related, interdependent and mutually supportive. Use of IT to interface and integrate each function with the other saves lot of staff time.

Acquisition

Computerized acquisition helps in selection, ordering and procurement of library materials. While doing these operations, libraries will be using the same bibliographical details of the documents such as author, title, imprint, collation etc. The detailed output of acquisition system cover: (1) generation of order lists in the form of computer files for new books by author or subject or vendor-wise; (2) pre-order searching; (3) approval process; (4) updating of existing orders; (5) placing of orders to respective booksellers and sending reminders for unsupplied items; (6) posting of information regarding the books received to the users who have suggested books for procurement; generation of lists of suppliers according to their specialization.

The selection of new books can be done either through traditional mode or through surfing the Internet where commercially available services like amazon.com are used. Searching websites of different institutions of interest also can do it. Many of the major booksellers in India are also willing to regularly post books available with them using e-mail. Contact with such booksellers through e-mail would be advantageous to speed up acquisition. Several files can be maintained in a computer based acquisition system mainly for keeping records of all documents on order, bookseller directory, client directory etc. The system can be used to print out order for books to the appropriate supplier. The system can also generate reminders periodically on a pre-determined date. When an item ordered is received in the library, the order record with the bibliographic details may become the basis for the catalogue record.

Cataloguing

Cataloguing includes the job of describing, recording and displaying details of the holdings of the library. Computers are used to aid in the production, maintenance and updating of catalogues. The quality of the catalogue depends ultimately on the cataloguer. In other words, initial data input is still the cataloguer's work.

Bibliographic details are gathered from relevant source or from the acquisitions systems. Usually there is one main or master file (database) which gives the holding of the library, and a temporary file for cumulating the additional records for bringing out the accession list. Once the catalogue of holding is available on the computer, the documents can be searched, retrieved or re-arranged in the desired fashion.

Thus there are several steps to follow while computerising a manual database of holdings and making the information search and retrospective retrieval more convenient.

After initial input of the records, the computer can perform a simple test on the record structure, and errors can be located and checked. Again, if a basic record structure of software package format as that of the CDS/ISIS is used, entry of data becomes a very simple process. The computer can be asked to generate added entries if required, which can later be stored in the main file. Separate listings for authors, subjects and keywords for access can be created. Now a days different machine readable formats like US-MARC, UNIMARC CCF and many others are available. Adhering to an agreed upon format is beneficial for participation in cooperative ventures.

The cataloguing department can edit the record by merely adding other details and merge in the catalogue file in an integrated system. Other processes that can be performed by a computerized cataloguing are:

- 1) new accessions listing;
- 2) merging new accessions after cataloguing with the library database on books
- 3) generation of author wise or subject wise bibliographies
- 4) Computer generated catalogue cards for stand- by manual catalogues.
- 5) Status of book received from acquisition.

Circulation Control

Broadly, circulation systems using computers have the details of the books issued and the person borrowing them entered on computer files in the names of persons and the dates of return on the basis of the period of loan (one week, a fortnight etc.). Daily check of the files will identify which books are due or overdue and notices can be printed automatically and sent to the users who have borrowed them. Provision for reservation data will make it possible to pick out those books for which there is a request and a user can be asked to return that particular book. Computerised circulation control will facilitate production of relevant statistics to help management decisions as well as control on borrower accounts. Bar code system is also available for issue and return of books.

Bar-coding

Under this new system of coding, each book is given a unique identification code. Accession number and call number can be used for this as a unique identification key for a book. Similarly, users can also be given individual identity code to facilitate charging and discharging of books at library issue counter. Handheld or flatbed electronic device is used to scan the barcode as well as the identity code given to the borrower and these two codes are registered in the computer to know which book is issued to whom. When the book is returned to the library, the same process is followed to discharge the publication. This is a unique facility which a public library can make use of where the transactions are many.

Serials Control

Serials control is perhaps one of the most complicated tasks of housekeeping. This is perhaps because of the literally unpredictable nature of serial publications. Some of the functions of the serials control system that can be handled by the computer are:

- i) listing of serials holdings; and
- ii) Accessioning of serials (which includes selection, ordering, checking-in, renewal of subscriptions, sending notices when issues are not received). Binding etc)
- i) Listing of serials holdings is basically producing a catalogue of serials. However with serials, there are problems relating to change in title, periodicity etc. A listing system will depend on the bibliographic record for each serial being available in machine-readable form. From a master file of such serials records, individual listings can be made based on title, subject, publishers/suppliers etc. Union lists of serials holdings by a library within a geographic region can also be produced by the computer.
- ii) Accessioning of serials must take into account receipt of issues, and periodicity of the serial, likely date of receipt in order to be able to send claims to suppliers for items not

received, and to update the holding file. To predict the arrival of periodical parts, each record must contain information about the publication pattern of the serial. This relates to the number of volumes per calendar year, number of parts per volume, supplements, if any, the pattern of numbering parts, and the frequency of publication. Details of the suppliers and the price per volume are necessary for the system to handle subscription, renewals and accounting functions.

Information Search and Retrieval

A number of commercial software packages, either integrated or stand-alone are available on the market. Such suppliers also customize the packages according to requirements.

When a database consisting of the library holding is computerized using a database package or software it will have an advantage in the search process in terms of speed and accuracy.

Data Base design

The design features to be considered for construction of a database mainly consist of:

- a) nature of data, input device to be used,
- b) types of output products needed,
- c) the structure of the file and its size, and
- d) the type of sorting and searching of data required.

For searching the database a component of the software, known as OPAC (Online Public Access Catalogue) is used. It is a facility to see the display of a library catalogue available in machine-readable form on a computer screen. When users search database through key terms of authors, subjects or titles after formulating a search expression using Boolean Operators such as AND, OR, NOT the computer will display the relevant records that matches the search expression.

Index generation is another area where computers are used very effectively. Keywords are assigned to describe a document and they are put into a required format. These key words would become the entry points for searching the database. In addition the search result can be either printed if a printer is attached to the computer or downloaded on to a storage medium like a floppy. The Current Awareness List and Selective Dissemination of Information (SDI), Retrospective Searches are some of the services where the computer capabilities can be used very effectively. The services of other libraries can be utilized by participating in co-operative networks. A number of library networks at local and national level are either in the process of development or operational. The networking may also be utilized for linking the apex library down to the libraries at block level. Internet technology is a development through which a number of services can be generated and provided.

15.6 PROBLEMS IN APPLICATION OF INFORMATION TECHNOLOGY

Several internal and external factors in organization and in libraries actually inhibit the adoption of new technologies.

Internal factors

- Lack of trained personnel
- Lack of leadership
- Fear of new technologies and the unwillingness to change, and
- Poor understanding of what may be expected of new technologies. However, the situation is fast changing now. Libraries are now moving towards automated systems.

External factors

Several factors external to the library but internal to the organization are also known to be

- limited resources for capital investment
- inability to absorb recurring costs, e.g. preventive maintenance of hardware and updation of software.
- low prestige given to library and information professionals
- lack of management support to the modernization of libraries; and
- varying organizational set ups of public libraries in different states.

Feasibility study

Before any new IT application or up gradation of an existing system is considered, it is useful to do a formal study of the feasibility of the new system or application. This provides to management, an investigative report of the possibilities costs and benefits.

Software

No software package can meet all the requirements of a given library system. Inevitably some compromises will be needed in workflows, input, output and report formats. However, in the last few years, new indigenous software has become available which are fairly satisfying and are customized suiting the work routine of a particular library.

An important decision to make during the analysis and design stage is whether to seek an integrated solution i.e., a system which would enable automation of a library's important functions under the control of a single piece of software, or to seek solutions first for the high priority operations of the library but with a perspective for later integration. This decision is dependent on the relative priorities of the library and the funds available.

Conversion to Computerised System

Retrospective conversion of the existing material to a computer readable record may probably need a combination of methods. Starting with ongoing acquisitions and going backwards may be a good general rule for retrospective conversion.

The shift from existing manual system to new computerised system can be either in a phased manner or parallel. It can also be in the form of pilot implementation in a section of the library or a complete change over to the new system on a specified day. It is also necessary to involve the supervisory and operational staff in all stages of planning, design, analysis and implementation of the new system in order to overcome the psychological barriers. Even the users have to be systematically educated to accept the new system to appreciate its benefits. Quality should be given vital attention, as the computer based catalogue enables multi-dimensional access to bibliographic as well as content information of library the catalogue.

Self-Check Exercises

- 4) List some of the important areas of computerized house keeping operators.
- 5) Discuss the practical problems faced by library in the application of Information Technology.

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

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

.....

.....

.....

.....

.....

.....

.....

15.7 SUMMARY

Increased availability of CD-ROM products and services in libraries, electronic publishing activity in the country, and new training and distance educational activities are all focused on the application of new technologies. The Information Technology options available have also increased of late, requiring careful evaluation before investing in hardware, software, and other IT products and services. The impetus for the adoption of new technologies are often driven by not only the technological and political climate prevailing in the community but also the user pressure and peer evaluation.

With the advent of Internet and other technological developments in the last few years in the area of telecommunication, multimedia and digital technologies, their impact on generation, organization, presentation, dissemination and use of information is enormous. The technology of networking with fiber optics, modems, data compression techniques and satellite links are all changing the way we communicate with each other. The following unit on 'Resources Sharing and networking' may throw more light on these developments.

Libraries need to be aware of the emerging trends and shifts and seek solutions, which are appropriate to their needs as well as the needs of their users. They should emerge from operating as centralized information systems to operating in distributed information systems and use technology that assists the library staff in empowering the library user.

15.8 ANSWERS TO SELF CHECK EXERCISES

- 1) In the changing scenario, the public libraries are expected to act as community information centers by providing different information services related to socio-economic agriculture, education, health, legal, employment etc.
- 2) The basic components of a computerized library system are:
 - 1) Hardware 2) Software 3) Networks
 - 4) Database 5) Users
- 3) Data communication means transmission of data from source to destination using telecommunication links. Some of the devices used by the public libraries include fax, videotext, E-mail, videoconference, Internet etc.
- 4) Some of the important areas of computerized house keeping operations include: a) Acquisition, b) Cataloging, c) circulation, d) Serials Control, e) Information Search and retrieval.
- 5) There are some internal and external factors, which inhibit adoption of Information Technology in public libraries as stated below.

Internal Factors

- Understanding the New Technology
- Motivation
- Lack of Trained Staff
- Financial Resources

External Factors

- Selection of Hardware and Software
- Maintenance of Hardware and Software.
- Lack of management support
- Poor recognition to library staff Lack of uniformity in public library system in different states.

15.9 KEY WORDS

Digital Library

: A library that converts, organizes, preserves, maintain and delivers information in digital format. Digital format means using digital codes to represent information

- Electronic Publishing** : Publication of books, Journals in electronic format such as e-books, e-journals etc.
- Multimedia** : Information presented through a combination of different communication techniques such as sound, text, colour, pictures etc.
- Online Catalogue** : The catalogue is stored in machine-readable form and accessed online by the library clientele by employing user-friendly software.
- Retrospective Conversion** : The partial or complete conversion of an existing catalogue into machine-readable form, as opposed to converting records created Urgently
- Scanner** : A scanner is an input device that transfers information from a piece of paper in to a computer.

15.10 REFERENCES AND FURTHER READINGS

Gopinath, M.A. (ed.) Information Access through Networks. Papers presented at the National Convention for Automation of Libraries in Education and Research. (CALIBER - 95) Hyderabad: Booklinks.

Parasher, R.G. (ed.) (1997); *Library and Information Science: Parameters and Perspectives* (Vol. I and II) New Delhi: Concept Publication.

Raju, A.A.N. (ed.) (1995) *New Vistas in Library and Information Science*. New Delhi: Vikas.

Ramaiah L.S. (ed.) (1997); *Information and Society*. New Delhi: Ess Ess Publication.

Rowley, Jennifer (1998). *Electronic Library*. Landon: Library Association Publishing.

Satyanarayana, B (ed.) (1998); *Information Technology: Issues and Trends*. (Vol. II) New Delhi: Cosmo Publication.

UNIT 16 RESOURCE SHARING AND NETWORKING

Structure

- 16.1 Objectives
- 16.2 Introduction
- 16.3 Resource Sharing: Needs and Objectives
 - 16.3.1 What is Resource Sharing?
 - 16.3.2 Objectives of Resource Sharing
 - 16.3.3 Benefits of Resource Sharing
- 16.4 Methods of Resource Sharing
 - 16.4.1 Areas of Resource Sharing
 - 16.4.2 What Makes Resource Sharing Successful
 - 16.4.3 The Prerequisites of Resource Sharing
 - 16.4.4 Barriers to Resource Sharing
- 16.5 Resource Sharing: National and International Scenario
 - 16.5.1 The Indian Scenario
 - 16.5.2 The International Scenario
- 16.6 Public Library Networking
 - 16.6.1 Needs and Objectives of Public Library Networking
 - 16.6.2 The Advantages of Public Library Networking
 - 16.6.3 Network -Based Services
- 16.7 Technologies involved: Hardware and Software
 - 16.7.1 Hardware
 - 16.7.2 Software
- 16.8 Bibliographical Standards and Formats
- 16.9 Library Networks in India and Abroad
 - 16.9.1 Library Networks in India
- 16.10 Recent Trends Approaches to Networking of Public Libraries in India
- 16.11 Role of Internet in Resource Sharing and Networking
- 16.12 Summary
- 16.13 Answers to Self-Check Exercises
- 16.14 Key Words
- 16.15 References and Further Reading

16.1 OBJECTIVES

After reading this Unit you will be able to:

- get a comprehensive conceptual background of library resource sharing and networking;
- understand the prevailing library resource sharing and networking systems in India and abroad; and
- Grasp the primary requirements in public library resource sharing and networking.

16.2 INTRODUCTION

Co-operation among libraries is the foundation for sharing of resources. Library cooperation is age old. It can be traced back to 200 BC when Alexandria Library shared its resources with

Pergamum Library. Such isolated attempts were made in some place or other through out history.

The first major union list entitled, A Catalogue of Scientific and Technical Periodicals was compiled by Henry Bolton in 1885. In 1911-12 with the objective of sharing facilities and resources a number of bilateral agreements were entered into by numerous libraries in London. The first step towards formal resource sharing and networking was started in 1917 when the first inter-library -loan code was formulated by ALA (American Library Association). University libraries in U.K initiated the first full scale, permanent cooperative organization when in 1923 the Association of University Teachers decided to launch a scheme of co-operation between university libraries, which later resulted in the formation of a Joint Standing Committee on Library Co-operation. The publication of the Union List of Serials in Libraries in the United States and Canada in 1927 was another notable achievement in this direction. The establishment of the Library of Congress Cooperative Cataloguing Division in 1932, expanded sharing of information to most of the libraries in the U.S and Canada. With this, the seeds of library co-operation and networking were sown in the world.

Cooperative effort didn't end here. In fact, it took a big leap as it spread to every imaginable areas like abstracting and indexing, acquisition, bibliographical access, cataloguing, circulation, collection development, continuing education (staff and users), literature searching, management and accounting, microfilming, photocopying, publication, referral services, storage etc. While resource sharing picked up in 1910s, networking of libraries using computer and communication facilities became a reality in 1970s.

16.3 RESOURCE SHARING: NEEDS AND OBJECTIVES

Information explosion, the rise in cost of publications, the dwindling financial position of libraries, limitation of space in libraries, impact of technological advances in communication and location of libraries in distant and remote areas necessitated the need for resource sharing and networking of public libraries.

16.3.1 What is Resource Sharing?

Resource sharing is a sort of implied agreement amongst participating libraries wherein each participant is willing to spare its resources to other members and in turn is privileged to share the resources of its partners as and when the need arises.

Resource sharing refers to the sharing of one central processor by several users and several peripheral devices. It denotes a mode of operation whereby functions are shared in common by a number of libraries. The goals are to provide a positive networking effect: (a) on the library user in terms of access to more materials or services; and/or (b) on the library budget in terms of providing level of service at less cost, increased service at low cost, or much more service at less cost than if undertaken individually. These goals should be realized without harm to the missions of participating libraries, although their methods of operation invariably must be adjusted. Similarly, the goals are realizable only with some changes in the habits of the users.

16.3.2 Objectives of Resource Sharing

The most important goal of resource sharing is to maximise the availability and use of materials and services at minimal expense i.e. focus on access rather than possession. It implies extending the resources and services of libraries to wider categories of users. The fundamental premise is: no library can possess in one place all documents in the most narrowly defined subject areas due to the exponentially expanding mass of printed materials and the increasing cost of acquiring any of it, leaving alone expenses in personnel, space and processing/maintenance. Thus, the main objectives of resource sharing are:

- reduction in cost,
- elimination of possible duplication of library materials and efforts,

- maximum accessibility of information without losing the identity of individual libraries, and
- possibility of concentrating in some specialized areas in terms of collection and services.

These objectives will be achieved through networking of libraries and information centres, interactive computer systems and telecommunication facility.

16.3.3 Benefits of Resource Sharing

As it is being increasingly realized that no library can afford to acquire all published materials in the areas of their specialization, (due to high cost of procurement, investment in processing, servicing, space and time), the tendency is towards sharing resources with other libraries.

The document delivery through inter-library loan or supply of photocopies of documents has emerged as a unique selling proposal for resource sharing. The emergence of new technology (computers, communication) ensures that useful information will be made available to all users faster irrespective of where they are,

Cooperative collection development does result in effective rationalization of acquisitions in the library. Cooperative cataloguing and classification reduces the financial burden. It has been proved that the cost in the processing of a book through a shared system will be much less compared to what is done in an individual library. This, of course, leaves out the cost involved in the repeated processing of a particular document in hundreds of libraries.

The economics of resource sharing stands out in the cost of housing and servicing of a document. It is computed that the cost of storing and servicing a document is much higher than the cost involved in borrowing it through a resource-sharing network. There are also other paying factors like cooperative human resource development and sharing of human resources (expertise) amongst the libraries.

In the final analysis, it is not the economic benefits /economic compulsions alone that are appealing but it is as much the other benefits connected with efficient delivery of document/information which is the prime objective of a library.

Self-Check Exercise

- 1) Define resource sharing and elucidate its objectives.
- 2) What are the benefits of resource sharing?

Note: i) Write your answers in the space given below.
ii) Check your answers with the answers given at the end of the Unit.

.....

.....

.....

.....

.....

.....

.....

.....

16.4 METHODS OF RESOURCE SHARING

16.4.1 Areas of Resource Sharing

The areas amenable to resource sharing are:

- a) **Inter-library Loan (ILL):** On receiving an enquiry for information or a document from a library, the staff in the other library tries to locate the material, and informs of its availability

to the requisitioning library. The material is either sent through courier/post or is picked up by the library. In the electronic system, the request is received through electronic mail and the information is also sent through e-mail. However, hardcopies (books/photocopies/other forms) are sent through the traditional mode as mentioned above.

- b) **Acquisition:** Cooperative acquisition helps libraries rationalize their acquisition, which is, based on a predetermined policy vis-à-vis other libraries. Your library may buy books only in the field you have already agreed upon and other libraries acquire the books in their agreed fields. In the field of cooperative acquisition the new thrust has been in the cooperative subscription of journals which takes two forms: a) local arrangement between libraries or b) consortia with formal agreement with the publishers. These are predominant among the special libraries. In the networked environment, the libraries have access to the latest information (not only on books released but also whether they should procure the one based on the cooperative policy) and order them fast online and
- c) **Cataloguing:** The most popular form has been where the proofs of a book at its printing stage are sent to a central library system like the British Library or the Library of Congress. These libraries in turn catalogue and in some cases classify the books and these data are published by the publishers on the verso of the title page. In the cooperative automated network of libraries, the system offers online cataloguing with full screen editing and access to a database. The centralized cataloguing saves duplication as, if a book is already catalogued by a library in the system, one has simply to put the location mark and/or input the local requirement. The data can be downloaded from the central database into the local database.

Catalogue based services which a cooperative library system can offer are:

- 1) Database service
- 2) Document supply service
- 3) Collection development
- 4) Communication based service viz., referral, e-mail, bulletin board, etc.
- d) **Personnel:** It allows not only sharing of expertise of skilled personnel but also facilitates trading of personnel as well as users.
- e) **Information services:** specialized institutions in their libraries or information centres are generating information facilities and services. These can be easily shared through electronic mail and networking provided it is stored in machine-readable form.
- f) **Translation services:** One is commissioning translations on cooperative basis and the other is sharing the already translated materials. Translations that are already done (like those by INSDOC) may be accumulated to set up translation banks created in the machine-readable form.
- g) **Development of special collection:** Agreements between libraries to procure documents on assigned areas is one of the important features of resource sharing. As other libraries are building up on penumbral areas, a library can be confident and comfortable about specializing in the area of its interest. As information becomes quickly available through resource sharing networks, this process becomes all the more smooth and trouble free.
- h) **Cooperative storage:** In this arrangement, less used materials in the cooperative system is moved to a predetermined location. Whenever there is need for such materials, they are borrowed by a library and returned after use. This arrangement reduces the duplication of materials and provides more space for new books in the participating libraries.

16.4.2 What Makes Resource Sharing Successful?

Resource sharing becomes successful when the authorities as well as users realize its significance not only out of compulsions of today but also on the other benefits: They should realize that resource sharing is the only effective way for having access to information.

Libraries and information centres assume a new role as effective managers of information, besides the traditional role as custodians of documents.

Networking at all levels; local/regional/national/international should become effective by developing as well as updating constantly the various tools (union catalogues, directories etc.) that support the resource sharing process.

16.4.3 The Prerequisites for Resource Sharing

- On the one hand serious users fear that resource sharing may restrict their scholarly pursuits. They feel that the participant library may not buy sufficient number of books to lend. There is also the fear that the cost of sharing may exceed the cost of buying the books. However, they should realize, on the other hand, that resource sharing opens up a wide range of resources for use by numerous users if well-planned devices are adopted.
- Resource sharing is based on the principle of give and take and also presupposes sustained hard work. There are different activities under resource sharing, like inter-library loan, document delivery services, exchange of publications and participation in online library network. The participating libraries must develop suitable protocols, go for standardization of data exchange format, and convince users about long term advantages.

16.4.4 Barriers to Resource Sharing

There are many barriers to resource sharing both in the normal context and in the electronic environment. Some of these are:

- a) Fear or unwillingness among the library staff about the new arrangement. They at times resist it as they are not willing to take extra burden of inter-library loan or other related activities.
- b) Restrictions imposed by the authorities: Some authorities insist that library materials should not be shared with other libraries.
- c) Lack of facilities to support resource sharing: Libraries many not have copying facilities or electronic document delivery systems.
- d) Communication problems: Long distance between participating libraries impedes smooth functioning of the resource sharing system. In the electronic environment too the poor communication links stands as a perennial problem in developing countries like India.
- e) Lack of funds: Lack of fund for automation, networking, inter-library loan operation etc. stand in the way of resource sharing.

Self-Check Exercise

- 3) What are areas amenable to resource sharing?
- 4) What are the barriers to resource sharing?

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

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

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

16.5 RESOURCE SHARING: NATIONAL AND INTERNATIONAL SCENARIO

16.5.1 The Indian Scenario

In India there appears to be no cases of resource sharing in the field of public libraries. However, resource sharing is in vogue in scientific libraries though not in the full-fledged form. One significant example is the case of the National Union Catalogue of Scientific Serials in India (NUCSSI) compiled and published by INSDOC containing serial holdings of 850 scientific libraries in India. On receipt of an order for a document by any library, the INSDOC first tries to locate the document in its own Library, and if it fails then, in major libraries in Delhi. In the latter case, the INSDOC staff visits the concerned library, locate the required document and get it on inter-library loan or get it photocopied. The photocopy of the document is dispatched to the user by mail.

Another example is the Union Database of Current Serials of DDC created by INFLIBNET on nearly 4,000 unique serial titles subscribed to by 6 university libraries. Any document located through this Union database can be requisitioned from the holding university library. Similarly NASSDOC has compiled a Union Catalogue of Serials in Social Sciences, which is now made available in machine-readable form. Two other union catalogues are: Union Catalogue of S&T Serials in Mysore City Libraries under MYLIBNET and the Catalogue of Books held in Indian Institute of Science, National Aeronautical Laboratory and Raman Research Institute, Bangalore. Union catalogues, of course, presupposes resource sharing.

16.5.2 The International Scenario

OCLC (Online Computer Library Center), Ohio is a nonprofit library network of more than 11,000 libraries in 41 countries. Founded in 1967, the original objective of OCLC (earlier Ohio College Library Center) was to establish an automated cooperative cataloguing venture. Over the years, it expanded its services to include inter-library loan system (1979), serial control (1980), and acquisition (1981). The bibliographical data on these four systems are held centrally on OCLC computers. In order to obtain a document under Inter-library Loan, a borrower library has to send an online request to the potential libraries until the request is filled.

BLDSC (British Library Document Supply Centre), Boston Spa with the help of 17 back-up libraries provides document supply service, based on its most comprehensive collection of journals, reports, theses, conference proceedings and books. Inter-library lending of these documents is carried out by BLDSC within U.K. and with national centers abroad.

Self-Check Exercise

5) Explain the resource sharing arrangement in vogue in India.

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

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

.....

.....

.....

.....

.....

.....

16.6 PUBLIC LIBRARY NETWORKING

Network (consortiums or cooperatives) is one of the organisational arrangements for achieving the objectives of resource sharing. When two or more libraries and/or other organisations are

engaged in a common pattern of information exchange, through communications, for some functional purpose, it is called library network. Libraries may be in different jurisdictions but agree to serve one another on the same basis as each serves its own constituents.

The formal dictionary meaning of network is 'a connected system'. A library network means a system under which libraries are connected, obviously for resource sharing. Technical dictionary definition of network implies 'computer and communication links that permit computers to communicate with each other and to share programs, facilities, data and knowledge bases'. A network can be local (one room, one office, one institution), national or even international.

One often comes across various terms as computer network, library and information network and communication network. Communication networks (like TELENET, TYMNET, DIALNET) are channels of transmission of data which are carried through the telephone lines/microwave/satellite, to which the computer network switches on to send/receive information /data. Computer network, on the other hand, is a category of computer system wherein multiple computers are interconnected. The purpose of a computer network is to share the resources (like databases, software, computing resources) of all computers among various users that are connected to the network. For example, in India, we have computer networks like NICNET, INDONET, ERNET etc). Library /information network is distinct from computer network. It is computer-based (i.e. computer network-based) network of library/information centres. In other words, library network is a network of database of various library/information centres connected through computer network to facilitate sharing of resources. Generally when we mention a network it implies the computer network-based library and information network (like DELNET, INFLIBNET, CALIBNET etc.).

In short, a library network can be defined as "two or more libraries engaged in a common pattern of information exchange, through communications, for some functions or purposes. A network usually consists of formal arrangement whereby materials, information and services provided by a variety of libraries are available to all potential users. Libraries may be in different jurisdictions but agree to serve one another on the same basis as each serves its own constituents. Computers and telecommunications may be among the tools used for facilitating communication among them" (the US National Commission on Library and Information Sciences, 1975).

16.6.1 Need and Objectives of Public Library Networking

As can be visualized the development of network has been a result of 'compunication' (computer + communication) in the background. Hence the history of development of network can be traced with that of 'compunication'. The development matured in the mid-1960s when the concept of remote computer access was adopted. It was immediately followed by propagation of the standard bibliographic format called Machine Readable Cataloguing (MARC). The system has grown very fast ever since and today it is in a very advanced stage wherein a network can provide inter-library loan support, CD-ROM based services, retrospective conversion, group purchasing agreements, and electronic document delivery services.

In general the public library network may have the following objectives:

- a) To strengthen bibliographic control and also have computer-based bibliographical databases in areas of interest to the public,
- b) To encourage creation of non-bibliographical databases,
- c) To develop and promote technical and organizational structure and capabilities for exchange of data,
- d) To develop a national information infrastructure.

The needs for public library network are enumerated below:

- i) One can verify whether a particular document is available in the network. that too in ease,

- ii) The network can arrange for the delivery of the needed document more efficiently.
- iii) Network can motivate smaller libraries to participate in view of the larger advantage, and can provide very powerful stimulus to productive improvement in the library services.
- iv) Network helps in rationalization of resources, and improvement in human resource development.
- v) Network promotes socio-economic development of the country.

16.6.2 The Advantages of Public Library Networking

More services for the same cost

Reducing and/or controlling the cost of the existing services

Minimizing the operational cost of the collection development, and

Improving the quality of information services provided to the user community

16.6.3 Network -Based Services

Following are the network-based services offered by libraries:

- 1) Catalogue services: shared cataloguing; union catalogue; online catalogue access of the shared database, retro conversion of bibliographical data,
- 2) Database services: reference and referral services,
- 3) Bibliographical database services: retrospective searches; SDI services; CAS,
- 4) Document supply services: Inter-library loan; Document delivery,
- 5) Collection development: Cooperative selection and procurement,
- 6) Communication-based services: Electronic mail/bulletin boards/discussion groups, file transfer,
- 7) Computer conferencing and interactive video conferencing,
- 8) Web OPAC

Self-Check Exercise

- 6) Explain the need for public library networks
- 7) What are the network-based services offered by libraries?

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

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

16.7 TECHNOLOGIES INVOLVED: HARDWARE AND SOFTWARE

16.7.1 Hardware

Hardware configurations may be identified to cater to:

- a) Computerisation of the library, and
- b) Networking of libraries

The computer hardware required for networking is mainly the microcomputer. It may not be necessary to discuss here the hardware configurations for a network. However, the essential qualities for hardware for library networking are the following:

- a) Minimum hardware redundancy.
- b) Provisions for a clear upgrade path for the phased implementation strategy.
- c) Scope for accommodating additional terminals.
- d) Capacity to be compatible with the best available software on library networking.

16.7.2 Software

Software can be split into two main types — system software and application software or application programs. System software is any software required to support the production or execution of application programs but which is not specific to any particular application. In other words system software controls the functioning of the computer and its peripherals. Examples of system software would include the operating system, compilers, editors and sorting programs.

Application Software is the instructions executed by a computer, as opposed to the physical device on which they run (the 'hardware') Examples of application programs would include an accounts package or a library package. Library software should support (a) library automation, (b) database construction and information retrieval, and (c) networking.

A library obtains software by employing any one of the following methods:

- 1) Purchase a ready-made package from the market, 2) Get custom made software by a software agency 3) Develop one in-house. The usual practice is to buy readily available software because they do maintain high quality at competitive rates, the experience and expertise of the vendor, are available for immediate installation and are backed by service. However, care should be taken while selecting such software. The report of the Inter-Agency Working Group of INFLIBNET (1998) has recommended 23 special features of a library network/software, which should be taken into account. Some of these are enumerated here:

- The package should be integrated preferably to support library automation as well as database creation
- Should be compatible with national and international standards
- Should be user friendly (menu driven), supported by manuals, and training and necessary customization as per requirement of a particular library
- If stand alone software, it should be upgradeable to accommodate multi-user
- Should support data security (password etc.), should have back-up/recovery facilities
- Should have indexing facilities, provision for thesaurus, authority file maintenance,
- Should facilitate search, import/export of data.

Library software of all hues and colours are available now in the market. We shall confine our discussion to a handful only:

UNESCO's CDS/ISIS (DOS version) or WINISIS (window version) is almost free of cost. It has powerful information storage and retrieval software, equally powerful searching facility and has export/import facility in ISO 2709 format. However, it can do no library in-house functions. This software is very ideal from two points of view viz., 1) it is almost free and a public library with financial constraints to buy a full-fledged software still can do the most important part of automation i.e. creation of databases; 2) Creation of databases is the starting point for union catalogues as well as networking.

TLMS

Total Library Management Service (TLMS) marketed by the Web OPAC Applications Private Ltd, Pune, is the one identified (based on the parameters fixed by the Department of Culture, Govt. of India) by the RRRLF for public libraries. RRRLF is expected to buy many copies for free distribution to public libraries in India. It is available on window and unix platforms and is moderately priced compared to many other software.

LIBSYS

Produced by Libsys Corporation, New Delhi, it has been in this business for long and has a headway compared to other software vendors. It is fully integrated software generally patronized by special libraries. It has all the features required like comprehensive in-house operations, search facility, security systems etc. The main drawback has been the high price and high maintenance charges.

Alice for Windows

Sold by Softlink Asia Pvt. Ltd. New Delhi is a relatively better rated package having all the features of a good software. It is reported to be available in the windows as well as in unix platforms and moderately priced.

SLIM++

System for Library Information and Management (SLIM++), a product of Algorhythms, Pune (windows and linux platforms), is an integrated software having all the features for library management. The modules include, besides the normal, webopac, bulletin printing, Z39.50 server, export/import in CCF/MARC formats etc.

Self-Check Exercise

- 8) What are the important library software available in India and which are the two more suited for public library environment?

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

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

.....

.....

.....

.....

.....

16.8 BIBLIOGRAPHICAL STANDARDS AND FORMATS

To facilitate increased international exchange of information (or merging of information originating from different databases), standardization of information processing and exchange procedures are essential. UNESCO's UNISIST Programme has recognized standardization as

one of the contributing factors to information systems interconnection. Interchange of bibliographical records requires agreement on standards governing the organization and representation of data, on record definition, and its content. Some of the significant standardization efforts in the international level have been the MARC format (US), format devised by the UNESCO's Reference Manual, UNIMARC, CCF and ISO 2709.

Libraries that contemplate networking have to adopt one of these standards before database design. For instance, in India, DELNET utilizes CCF, the libraries under the Dept. of Culture, Govt. of India including National Library, and RRRLF have adopted UNIMARC whereas the INFLIBNET advocated MARC 21. Libraries that are part of a network have to invariably adopt the predefined standards before designing the database (or before retro conversion in case of existing database.) and also enter the data by a predetermined exchange format (derived from the adopted standard). Exchange format is an arrangement of data according to predetermined rules using tags or set positions in the record for identification of data elements, all to facilitate transfer of data between the systems. (CCF is one such format).

While Exchange Formats are a sine qua non for information exchange in machine readable (computerized) form, standardization is essential in other areas as well like:

Cataloguing
Classification
Subject heading
Bibliographical description etc.

The cooperating libraries should prefer one common system from the available choices for cataloguing (AACR/CC etc.), classification (DDC/UDC etc.), subject heading etc. For instance, the libraries under the Department of Culture, Government of India, (public libraries), as explained earlier, have adopted the following standards to see that all the libraries would create /exchange records smoothly:

AACR II (cataloguing); DDC (classification); Library of Congress Subject Headings (subject heading); UNIMARC

16.9 LIBRARY NETWORKS IN INDIA AND ABROAD

The major development in establishment of library network in India took place, though late, during mid 1980s as a result of Government of India's efforts towards creation of data networks like NICNET, ERNET, INDONET, SIRNET and VIKRAM. NICNET was set up to link government departments located at various geographical levels via INSAT IB satellite. ERNET is the computer network for the academic and research community providing e-mail, file transfer, remote log in, database access and bulletin board. INDONET, a commercial computer network connected to various communities, is designed to provide access to computing and software resources of CMC Ltd. to the users. VIKRAM is a packet-switched public data network providing remote access points, all connected by leased or dial-up lines. SIRNET (Scientific and Industrial Research Network) is expected to interconnect all CSIR laboratories and other R&D institutions in India. Setting up of the data/computer network facilitated organization of library and information networks.

16.9.1 Library Networks in India

The important library networks in India are briefly explained in this section.

16.9.1.1 Public Library Networks in India

Public libraries by the very fact that they are most underdeveloped are yet to make a mark in networking in India. Let alone networking, the public libraries in India are not even computerized. A recent survey of application of IT in public libraries showed that only 8 per cent of the libraries are computerized, 28 per cent planned to introduce automation and the rest (64 %) have had no plans at all. They are all, however, aware of the paramount importance of computerization. There may be a couple of islands in India in this respect, which, one may say, have attempted to take a step into this field.

The Delhi Public Library (1951) has grown into a premier public library system modern India and has become the busiest public library in South East Asia. Besides the Central Library, the zonal library, and branch libraries, it has a network of several community libraries, sub-branch libraries, reading rooms, mobile point services etc. However, this premier library system of India is yet to attain any tangible breakthrough in networking. In fact, it is still in the early stage of computerization. Presently, computers have been installed in Central Library and the Zonal Library and computerized cataloguing has been started. They have also brought out a couple of databases on periodicals.

DELNET

Developing Libraries Network (DELNET), formerly known as Delhi Library Network, is one of the early networks (1988) in India. The National Informatics Centre, Ministry of Information Technology, Government of India and India International Centre, New Delhi are currently promoting DELNET. DELNET, it may be noted, is not an exclusive network of public libraries.

DELNET has been established with the prime objective of promoting resource sharing among the libraries through the development of a network of libraries. It aims to collect, store, and disseminate information besides offering computerised services to users, to coordinate efforts for suitable collection development and also to reduce unnecessary duplication wherever possible.

DELNET has been actively engaged with the compilation of various Union Catalogues of the resources available in member-libraries. It has already created the Union Catalogue of Books, Union List of Current Periodicals, Union Catalogue of Periodicals, CD-ROM Database, Database of Indian Specialists, Database of Periodical Articles, Union List of Video Recordings, Urdu Manuscripts Database, Database of Theses and Dissertations, DEVINSA Database, sample databases of language publications using GIST technology and several other databases. It provides an array of facilities including E-mail to its two hundred and forty three member libraries including both institutional and associate institutional members.

16.9.1.2 Other Library Networks in India

A few of the other than public library networks in India are being treated below. This is not an exhaustive but an illustrative list of such networks.

CALIBNET

The first library network to be set up in India was the Calcutta Library Network (CALIBNET) in 1993. It was meant to introduce a cost-effective modernistic means to provide information support to academic, research and other scholarly pursuits and to help officials, functionaries and decision makers as well. The objectives of CALIBNET are:

- To improve resource utilization and services level to patrons at the individual libraries by providing automation facilities for all housekeeping functions and user services such as Acquisition and accounting, Serials control, Cataloguing and User services
- To operationally enhance resource sharing by providing individual libraries access to their composite databases of Union catalogue, Current awareness services and SDI, Subject profiles
- To provide efficient and reliable means to provide Inter-library user services.
- Document copy and transfer facilities.

MALIBNET

Madras Libraries Network is a network of libraries in and around Chennai set up under the initiative of INSDOC in 1993. Membership is awarded to universities, colleges, R & D institutions, industries, and individuals, on paying suitable membership fee.

Presently, nearly 50 libraries in Chennai are contributing actively to the creation of various databases on Malibnet. With the help of communication links and sophisticated information technology, the resources of the member libraries are shared and made available to the users.

The services offered by MALIBNET are:

- Access to list of current serials subscribed in 50 libraries
- Access to full journal holdings of these libraries
- Access to specialised databases giving article index with abstracts
- Door delivery system for document copies
- Access to international databases through INSDOC
- Full text of journal articles from member libraries supplied within 48 hours
- Creation of specialised databases at user's request
- Library automation; Training courses; Consultancy in networking and computerisation

Services available free of charge to members are:

- 1) Electronic Mail (E-mail): Free exchange through E-mail among all member libraries and Network Service Centre
- 2) MALIB Card: Enables card holder to consult member libraries and provides free access to MALIBNET resource centres
- 3) Online Access: Free online access to all the MALIBNET databases
- 4) Free CAPS service: Free dispatch of contents information of journals through E-mail

INFLIBNET

INFLIBNET is a project sponsored by the UGC to link the libraries and information centers in universities, deemed universities, institutions of national importance, UGC information centers, R&D institutions and college libraries in institutions affiliated to CSIR, ICMR, ICAR, DRDO and other government departments. It endeavours to put together all existing and anticipated information resources in standard and machine-readable form and make it accessible for search from almost any place in the country.

It operates at four different levels such as National Level which coordinates the activities and services of the network; at Regional Level from 4 regional centres which are endowed with the task of maintaining the union catalogues of libraries in their respective region; Sectoral Centres called Sectoral Information Centres which will take care of the maintenance of retrospective bibliographic databases in specific missions or subjects.

Local Levels called Local Nodes working from universities/colleges/institutions will serve the end users directly.

The major objectives of INFLIBNET are to:

- evolve national network
- create online Union Catalogue
- provide access to databases
- establish resource centers
- encourage share cataloguing
- implement computerization

INFLIBNET services are: catalogue based services, database services, collection development, communication based services (viz. e-mail, bulletin boards, audio/video/computer conferencing) and document delivery service (vide Appendix for a case study on document delivery service of INFLIBNET).

BONET

Bombay Library Network aims to promote cooperation between libraries in Mumbai. It offers training related to library computerization and networking. Participating libraries contribute to make BONET funding self-sufficient. It provides access to centralized catalogues and e-mail facility to its members. BONET offers the following services:

- 1) Consultation on standards
- 2) Staff training to member libraries
- 3) Online catalogue of journals, books etc.,
- 4) Inter-library loan for books and periodicals,
- 5) Information retrieval services,
- 6) Computer network support for book ordering,
- 7) Online access to international databases,
- 8) SDI services,
- 9) Courier service for inter-library loan, and E-mail.

RECNET

Regional Engineering Colleges Network intends to provide access to the resources of 17 Regional Engineering Colleges in the country. It was formed in 1996. Under the consortium, all members of RECNET create their library data in the electronic form, which is merged with the union catalogue semiannually. Response to queries/requirements from any member of the network is sent within 10 days. This network is still in the formative stage.

Some other library networks are **Pune-Network, Mulibnet, Nagnet, and Hylibnet** etc.

All these networks are not strictly public library network. Mostly, these have been established to cater to the needs of S & T and academic community.

The Alliance Library System: The Alliance Library System (ALS), Illinois (1994), is a partnership of nearly 300 academic, public, school, district, and special/corporate library members. The purpose of the Alliance Library System, a multitype library consortium, is to encourage and assist in the full development of all member libraries through cooperative programmes and the sharing of resources for the benefit of their public. The primary mission of the Alliance Library System is to encourage and facilitate interlibrary cooperation, education, and resource sharing within its diverse multitype membership.

Western Library Network(WLN): Initially called Washington Library Network, started in 1972 involving 10 libraries in Washington State, the network has now a database containing 5.5 million records of 250 libraries. The services offered are current and retrospective and shared cataloguing, and automated requisitions.

Research Libraries Information Network (RLIN): The RLG (Research Library Group), Stanford University, California is a consortium of research libraries (estd. 1978) dedicated to resolving common problems in collection development, management, access and preservation. The databases has presently 30 million records and services offered by the network are cataloguing, classification, maintenance, online acquisition and inter-library loan system.

UTLAS International (formerly Union of Toronto Library Automation System) covers more than 2,500 institutions in Canada and the U.S. Online catalogue, online public access catalogue, acquisition control, retrospective conversion and serial control are some of the services offered by the network.

BLAISE (British Library Automated Information Services): BLAISE became operational in 1977 and it is one of the world's largest networks. It offers three online services like BLAISE-LINK, BLAISE-LINE, and BLAISE-RECORDS. BLAISE-LINK offers access to biomedical and toxicology information in major databases like MEDLINE, TOXLINE etc. BLAISE-LINE is an online service offering bibliographical data in all subjects areas. BLAISE-RECORDS is created based on records obtained by OCLC.

Self-Check Exercise

- 9) What are the important library networks in existence in India?

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

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

.....

.....

.....

.....

.....

.....

.....

16.10 RECENT TRENDS/ APPROACHES TO NETWORKING OF PUBLIC LIBRARIES IN INDIA

National and international bodies involved in the promotion of public libraries have unequivocally advocated for library resource sharing and networking. Some of the initiatives are given below:

- 1) Public Library Manifesto 1994 underscored the need for legislation and strategic plans to define and promote library resource sharing and networking. The relevant part is quoted:

- To ensure nationwide library coordination and cooperation, legislation and strategic plans must also define and promote a national library network based on agreed standards of service.
- The public library network must be designed in relation to national, regional, research and special libraries as well as libraries in schools, colleges and universities.

The Manifesto has also identified development of information and computer literacy skills as one of the key skills.

- 2) The IFLA Public Library Guidelines 2001 have laid down in fair detail its vision on the promotion of library co-operation and resource sharing and electronic networks.

Co-operation and Resource Sharing: The public library should establish formal links with other organisations in the local community, e.g. schools, cultural institutions such as museums, galleries and archives, literacy programmes, chambers of commerce or boards of trade, in order to jointly improve services to the community.

Electronic Networks: The public library to become the electronic doorway to information in the digital age, should provide access to the resources of the library and to those of other libraries and information services through the creation, maintenance and/or participation in effective electronic networks at the local, regional, national and increasingly international levels. The library should provide free public access to the Internet/World Wide Web to all citizens, regardless of their economic means. It should have at least one public access workstation with Internet access and a printer that is not shared with staff. If possible the remote access to its electronic resources and services from their home, school or workplace should be made accessible 24 hours a day, seven days a week.

- 3) The Chattopadhyay Committee on National Policy on Library and Information System in its report (1986) underlined the need for networking of public libraries: All the libraries within a state should form part of a network extending from the community library of the village through intermediary levels to the district and state central library. The state network should eventually connect with the national level.

Despite the Chattopadhyay Committee recommendation in 1986 for networking of public libraries from community libraries to national level, no perceptible follow-up actions

were taken in this regard. It is but true that there is no public library network in India today, let alone a blue print. An indicative plan is presented below principally from the pedagogical point of view.

16.11 ROLE OF INTERNET IN RESOURCE SHARING AND NETWORKING

As you know Internet (Inter-network) is a close collection of thousands of computers at thousands of sites around the world, where users can pass along information and share files, irrespective of differences in the configuration/ make/ operating system of the computers. The 'interconnectivity' by the Internet has revolutionized the information transfer/exchange. Following are the services rendered by Internet in the resource sharing and networking of public libraries:

- 1) Mail service: The electronic mail (e-mail) facilitates interchange of mail across the globe at incredibly low rates as well as at equally incredible high speed. The mail transfers not only documentary mails but also audio and visuals, multimedia, programmes, data files etc. Thus e-mail has emerged as the communication tool for connecting resource sharing libraries and networks for making queries, or answering/sending information or data.
- 2) Electronic Publications: Internet can access a large number of electronic publications like journals, newsletters and newspapers. Some of these are tables of contents, while others are full text. Besides, increasing number of publishers is using Internet as a global way of offering their publications (called electronic journals) to the international community of users. The electronic delivery of a journal results in elimination of paper, storage, and transportation costs and the ability to handle complex data, tables, moving pictures, sound images and video clips.
- 3) Newsgroups and bulletin boards: Another valuable resource the Internet has to offer is the bulletin board system. The Bulletin board service offers a place where people of a particular interest can meet, discuss issues, and keep up with the latest trends in areas of their interest or talk about any subject of interest, all electronically. It is accomplished through USENET, the global news network.
- 4) Search and access information: Internet allows one to navigate through online catalogues of public libraries in the network situated in any part of the world, search and down load files/copy electronic journals. The tools used for this are the search engines (Telnet, Archie and Gopher) and FTP (file transfer protocol). The Telnet command is used to connect you to a host on which you do not have an account i.e remotely login to a host computer. Gopher, a popular Internet search and retrieval engine, gives you access to information including text and graphics, through a network of gopher servers. The program, Archie, derived from archive, performs its searches on the Internet in FTP repositories. FTP is software on the Internet that helps moving files from one computer to another. Any information you find useful can be downloaded to your machine through FTP and passed on to the users.
- 5) Search through the web servers: Another utility/tool that provides easy and convenient access to information is the www (world wide web) designed on hypertext and WAIS (Wide Area Information Networks Server). These allow a public library access to hundreds of databases and catalogues.
- 6) Other facilities offered by Internet are Chatting (letting you have a real-time conversation), Net meeting (enabling communication with others which supports voice, video, file transfers, chat messages, etc.) or Conferencing (allowing communication between more than one at different locations interconnected electronically)

The potential of Internet as a source of information to public libraries is immense.

Self-Check Exercise

10) Explain briefly the role of Internet in resource sharing and network.

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

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

.....

.....

.....

.....

.....

16.12 SUMMARY

The Unit is divided principally into two parts viz., 1) library resource sharing, 2) library networking.

The first part deals with various approaches and also the definitions of resource sharing and networking. It tries to give very briefly a historical perspective followed by a sketch on need and objectives and methods of resource sharing. Also included are the fields amenable to resource sharing and networking. Barriers to resource sharing is yet another subtopic treated in this part.

The latter part on resource sharing deals with the current national and international scenario in library resource sharing. While there is no tangible achievement in the field of resource sharing among public libraries in India, there are credible performances in other libraries, which have been detailed for the purpose of serving as leading lights to public libraries.

The second part deals with library networking. This part commences with a theoretical treatise on the said topic, like the need, objectives, advantages of library networking and services offered through it. It is immediately followed by an illustration on the technologies involved, both hardware and software, in library networking, and the significance of standards in networking for the interchange of information between libraries.

As in the case of resource sharing, networking of the public libraries in India does not have much to show? However, the picture is entirely different in the case of scientific libraries. Hence networks of scientific libraries have been briefly illustrated, again to offer a lead to public library networking. The Unit also gives a glimpse to what are the important library networks abroad. The second part concludes with an account of the role played by Internet in resource sharing and networking.

16.13 ANSWERS TO THE SELF CHECK EXERCISES

1) *Resource sharing is a sort of implied agreement amongst participating libraries wherein each participant is willing to spare its resources to other members and in turn is privileged to share the resources of its partners as and when the need arises.*

The main objectives of resource sharing are:

- Reduction in cost.
- Elimination of possible duplication of library materials and efforts.
- Maximum accessibility of information without losing the individual identity of libraries, and
- Possibility of concentrating in some specialized areas in terms of collection and service.

- 2) The document delivery through inter-library loan or supply of photocopies of documents has emerged as a unique selling proposal for resource sharing. Cooperative collection development and cooperative processing of documents reduces the financial burden.

The economics of resource sharing stands out in the cost of housing and servicing of a document. There are also other paying factors like cooperative human resource development and sharing of human resources (expertise) amongst the libraries.

In the final analysis, it is not the economic benefits /economic compulsions alone that are appealing but as much the other benefits connected with efficient delivery of document/information which is the prime objective of a library.

- 3) The areas amenable to resource sharing are:
 - a) Inter-library loan (ILL):
 - b) Acquisition:
 - c) Cataloguing: Catalogue based service a cooperative library system can offer are:
 - 1) Database service, 2) Document supply service, 3) Collection development,
 - d) Personnel:
 - e) Information services:
 - f) Translation services
 - g) Development of special collection: and
 - h) Cooperative storage:
- 4) There are many barriers to resource sharing not only in the normal context but also in the electronic networking. Some of these are:
 - 1) Fear or unwillingness among the library staff about the new arrangement /shortage of staff: 2) Restrictions imposed by the authorities, 3) Lack of facilities to support resource sharing, 4) Communication problems, and 5) Lack of funds.
- 5) In India there appear to be no cases of resource sharing in the field of public libraries. However, resource sharing is in vogue in scientific libraries though not in the full-fledged form. One significant example is the case of the National Union Catalogue of Scientific Serials in India (NUCSSI) compiled and published by INSDOC containing serial holdings of 850 scientific libraries in India. On receipt of an order for a document by any library, the INSDOC first tries to locate the document in its own Library, and then in major libraries in Delhi. The INSDOC staff visits the concerned library, locate the required document and get it on inter-library loan or get it photocopied. The photocopy of the document is dispatched to the user by mail. The second example is the Union Database of Current Serials of DDC created by INFLIBNET on nearly 4,000 unique serial titles subscribed to by 6 university libraries. Any document located through this Union database can be requisitioned from the holding university library. Similarly NASSDOC has compiled a Union Catalogue of Serials in Social Sciences, which is now made available in machine-readable form. Two other union catalogues are: Union Catalogue of S&T Serials in Mysore City Libraries under MYLIBNET and the Catalogue of Books held in IISc, National Aeronautical Laboratory and Raman Research Institute, Bangalore. Union catalogues presuppose resource sharing.
- 6) The network can arrange for the delivery of the needed document more efficiently. It can motivate smaller libraries to participate in view of the larger advantage, and can provide a very powerful stimulus to productive improvement in the library services. A network helps in rationalization of resource and an improvement in human resource development. It also promotes socio-economic development of the country.
- 7) Following are the network-based services offered by libraries:

- 1) Catalogue services: shared cataloguing; union catalogue; online catalogue access of the shared database, retro conversion of bibliographical data,
 - 2) Database services; Reference and referral services,
 - 3) Bibliographical database services; retrospective searches; SDI services; CAS,
 - 4) Document supply services: Inter-library loan; Document delivery,
 - 5) Collection development: Cooperative selection and procurement,
 - 6) Communication-based services: Electronic mail/bulletin boards/discussion groups, file transfer,
 - 7) Computer conferencing and interactive video conferencing,
 - 8) Webopac.
- 8) CDS/ISIS (WINISIS) of the UNESCO; Total Library Management Service (TLMS) marketed by the WebOPAC Applications Private Ltd, Pune; LIBSYS produced by Libsys Corporation, New Delhi; Alice for Windows sold by Softlink Asia Pvt. Ltd. New Delhi; and System for Library Information and Management (SLIM++), a product of Algorhythms, Pune are a few important library softwares available in the market.

The first two are preferred for public libraries. CDS/ISIS (WINISIS) is suitable for a public library as it comes almost free from the UNESCO and it is a very strong package when it comes to creation of databases, the primary requirements in a Library. By the fact that RRRLF is distributing TLMS to public libraries, it is assumed that the package is attuned to meet the parameters of a public library.

- 9) The important Library networks in India are: Developing Libraries Network (DELNET), formerly known as Delhi Library Network; CALIBNET, the first library network to be set up in India; Madras Libraries Network (MALIBNET), a network of libraries in and around Chennai set up in 1993; INFLIBNET sponsored by the UGC to link the libraries and information centers in universities, institutions of national importance, R&D institutions affiliated to CSIR, ICMR, ICAR, DRDO and other government departments; and Bombay Library Network (BONET).
- 10) The following are the benefits offered by the Internet in the resource sharing and networking of public libraries:
 - 1) Mail service: The electronic mail (e-mail) facilitates interchange of mail across the globe at incredibly low rates as well as equally incredible high speed.
 - 2) Internet provides access to a large number of electronic publications like journals, newsletters and newspapers.
 - 3) Another valuable resource the Internet has to offer is the bulletin board system.
 - 4) Internet facilitates search and access of information by navigating through online catalogues of public libraries in the network situated in any part of the world and also allows down loading of files/copying of electronic journals.
 - 5) Search through the web servers facilitates public library access to hundreds of databases and catalogues;
 - 6) Chatting and
 - 6) Conferencing

16.14 KEY WORDS

Automation: The organisation of machine handling of routines or operations, requiring minimal human intervention.

Bulletin Boards: An online message system, which can 'post' notices and general information on the terminals of users of a network

Database: Information stored on computer files and accessible via a remote terminal and telecommunication link

Document Delivery: This system enables users to order copies of materials retrieved by online searches, either by direct dispatch of items by the host or via an agent.

Electronic Mail: The transfers of messages, memoranda, letters, reports etc. between individuals or organizations by the use of videotext, online and online networks

**Resource Sharing &
Networking**

Inter-library Loan: Library activity, which provides document circulation to the outside libraries as a clientele.

Networking: A technique for distributing data processing functions through a system of interconnected computer systems and terminals. Library networking is interconnecting of libraries through computers for sharing of information/processing functions.

OPAC (Online Public Access Catalogue): An automated catalogue system stored in machine-readable form and accessed online by the library clientele via a VDU and employing user-friendly software.

Operating System: A software-programming package that controls the operation of user programs.

Resource Sharing: A sort of implied agreement amongst participating libraries wherein each participant is willing to spare its resources with other members and in turn is privileged to share the resources of its partners as and when the need arises.

Teleconference: A conference with participants in different locations linked by telecommunication devices

16.15 REFERENCES AND FURTHER READING

India. Ministry of H.R.D. Committee on National Policy on Library & Information System (Chairman: D P Chattopadhyaya) (1986). New Delhi: Department of Culture.

IGNOU, Study Materials in MLIS-03, MLIS-04, MLIS-06 and MLIS-E3

ILA. Preparing Libraries for the 21st Century: Seminar Papers: 40th All India Library Conference. Goa. 5-8 Jan. 1995

Thomas. V.K. Computerisation of Public Libraries in India: A Study. Seminar on The Role of Public Libraries in this Age of Rapid Growth in Information Technology, New Delhi, 16 Feb. 2001.

UNIT 17 PUBLIC LIBRARY SCENARIO IN INDIA, UK, USA AND CANADA

Structure

- 17.0 Objectives
- 17.1 Introduction
- 17.2 Public Library Scenario in India
- 17.3 Public Library Scenario in U.K.
- 17.4 Public Library Scenario in USA
- 17.5 Public Library Scenario in Canada
- 17.6 Summary
- 17.7 Answers to Self-check Exercises
- 17.8 Key Words
- 17.9 References and Further Reading

17.0 OBJECTIVES

After reading this Unit you will be able to:

- know the changing role of Public Libraries in the present society;
- make a comparative study of public library scenario in India, UK, USA and Canada; and
- understand the pivotal role of public libraries in information revolution.

17.1 INTRODUCTION

The Public Library Scenario in India, UK USA and Canada may be viewed from its service point as provider of access to information and knowledge. The public library service is considered as a prerequisite in all socio-economic, educational and cultural development of a society. There has been a considerable change in the type of services required by the users and how to satisfy their requirements. This change is inevitably making an impact on: (a) enhancing education and life long learning opportunities for children, adults and other disadvantaged groups, (b) supporting training, employment and business to foster economic prosperity, and (c) nurturing social cohesion through a politically and culturally informed and educated society. Application of information technology and resource sharing networks among the public libraries allows access to every citizen to communicate interactively. Such a sound public library system forms the core of a powerhouse of knowledge; enable all libraries to develop their information resources both in depth and quality.

While going through the public libraries scenario of all the four countries, you will find that in India there is a sound structure of public library system both in the enacted and non-enacted states and these libraries provide some basic library services which are explained in Unit 14. But the scenario and role of public libraries in UK, USA and Canada is quite different from India. Public libraries in these three countries clearly depict the vivid picture of their role in a changing information society.

17.2 PUBLIC LIBRARY SCENARIO IN INDIA

The growth and development of public libraries in India have been taking place both at national and state level since long. There are a number of memorable events that have taken

place since independence (1948-51) such as (i) Enactment of Madras Public Libraries Act, 1948 which was the first concerted effort in India to institutionalize, structure, coordinate and organise public library services. The second event was the setting up of the National Library, Calcutta in 1948 by an Act from the old Imperial Library and the third one was the setting up of Delhi Public Library, a joint project of UNESCO and Govt. of India in the year 1951. At present there are about 60,000 public libraries in the country. Again in 1957 Government of India appointed a committee under the chairmanship of K.P. Sinha to review the public library system and suggest measures for its future development. All these events opened the way to realize that enactment of public library act or library legislation in each and every state is essential for the development of the state as well as nation. Out of the 29 states and 6 Union Territories, only 12 states have so far passed the Library Legislation.

- 1) Tamilnadu Public Libraries Act, 1948
- 2) Andhra Pradesh Public Libraries Act, 1960
- 3) Karnataka Public Libraries Act, 1965
- 4) Maharashtra Public Libraries Act, 1967
- 5) West Bengal Public Libraries Act, 1979
- 6) Manipur Public Libraries Act, 1988
- 7) Kerala Public Libraries Act, 1989
- 8) Haryana Public Libraries Act, 1989
- 9) Goa Public Libraries Act, 1993
- 10) Mizoram Public Libraries Act, 1993
- 11) Gujrat Public Libraries Act, 2001
- 12) Orissa Public Libraries Act, 2001

The public library system in both the act enacted and non-enacted states is provided by (i) State Central Library (ii) City Central Library (iii) District Central Library (iv) Sub-divisional Library (v) Panchayat Library (vi) Village Library etc. (vii) Voluntary organizations. All these libraries generally provide lending and reading room services. Infrastructure development like modernization and resource sharing, collection development, preservation and conservation, human resource development etc. of all these libraries is very-very essential to provide effective and efficient public library services

Role of Raja Rammohun Roy Library Foundation (RRRLF)

The creation of Raja Rammohun Roy Library Foundation in the year 1972 as the nodal agency by the Government of India to promote and support public library movement and take the library movement to the grass root level is the latest measure adopted by the government for providing public library services in the country. The Foundation dedicated itself to do this noble job with the slogan "*Books for the Millions at their Doorsteps*", with the operation of several schemes of matching and non-matching assistance.

Matching

- 1) Assistance towards building up of adequate stock of books;
- 2) Assistance towards development of Rural Books Deposit Centres;
- 3) Assistance towards organization of seminars, workshops/book exhibitions, etc;
- 4) Assistance towards storage and display of books;
- 5) Assistance to public libraries below district level for increasing accommodation;
- 6) Assistance to acquire TV-cum-VCP/computers in public libraries.

Non-matching

- 1) Assistance towards adequate stock of books;
- 2) Assistance to centrally sponsored libraries;

- 3) Assistance to voluntary organisations providing public library services;
- 4) Assistance to children's libraries or children's section of general public libraries;
- 5) Assistance to libraries for different events.

There is no doubt that Raja Rammohun Roy Library Foundation's programme of assistance is most helpful to the cause of public library services in the country. The programme provides the best example of resource sharing between the centre and the state for the development of public library services at all levels.

Modernisation of public libraries is also another priority area of RRRLF by providing non-matching financial assistance to State Central libraries. Out of the 28 State Central Libraries; only 8 State Central libraries (Chandigarh, Gujarat, Karnataka, Tamilnadu, Andhra Pradesh, Pondichery, Lakshadweep) have initiated computerization and linking their libraries either to NICNET or DELNET. All these libraries have procured necessary hardware, software, creating bibliographic database, OPAC, all house keeping operations like requisition, cataloguing, circulation serial control and other management functions. Therefore, computerization and networking among the state central libraries is given top priority by the Foundation to provide effective and efficient public library services in the country.

Self-Check Exercise

- 1) Explain briefly the different measures taken by the state and central government to promote public library service in the country.

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

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

.....

.....

.....

.....

.....

.....

17.3 PUBLIC LIBRARY SCENARIO IN UK

Public library system in the United Kingdom is considered to be one of the great national resources. For more than a century, it has provided ordinary people with the opportunity to explore, enjoy and learn from the nation's vast storehouse of information and knowledge. The UK has a long tradition of free, public access libraries that was first recognized legally by the Public Libraries Act, 1850. In practice most public library authorities today charge for any of their services apart from the lending of books and access to reference sources. The UK's public library system today is a major national resource, allowing everyone full access to books, periodicals and other publications for their educational, cultural or recreational needs.

Local authorities manage public libraries in UK. Under the terms of Public Libraries and Museums Act, 1964, all of these authorities are obliged "to provide a comprehensive and efficient library service for all persons wishing to make use thereof". The overall supervision of public libraries is the responsibility of the UK Secretary of State of Culture, Media and Sports, but, within the terms of the 1964 Act, local authorities control their operation, management and levels of service.

Public Libraries in the UK are being called upon to respond to the challenge of economic, social and technological changes in society that include

- changes in working patterns
- increased leisure time

- the spread of leisure activity over seven days of the week and almost twenty-four hours of the day
- the phenomenal growth of the Internet and Web and public demand for access to these services
- increased UK Government interest in the rôle of libraries, through its support for programs to programs or concepts such as life long learning, the creation of a National Grid for learning, and access to information for all.

The most notable factor in this change was the UK Government's announcement of significant lottery funding for IT training for public library staff and the creation of digitized content in libraries announced in its response to the Library and Information Commission's Report (1997), *New Library: the People's Network*. This is the appropriate and valuable response to the roller-coaster of change and growth in information and communication technology, putting public libraries firmly back on the agenda of social, political and educational change and development in providing community information and local access to national programs such as life long learning.

The Library and Information Commission's 2020 Vision of the future information Society has emphasized: i) Content, (ii) Connectivity and (iii) Competencies. Key themes include:

- the superhighway new technology and virtual libraries
- the role of libraries in lifelong learning and, particularly, in literacy and other information skills development
- digitization of collections of national importance
- the future of libraries particularly public libraries in the information society
- skills development for knowledge workers in the twenty-first century
- cross-sectoral co-operation in all these areas and the need for a national framework for information policy development

All these developments and rapid growth of UK into an information society revolution are leading to increase in more sophisticated public library services for their users.

Self-Check Exercise

2) Discuss briefly the changing role of public libraries in U.K.

- Note:**
- i) Write your answers in the space given below.
 - ii) Check your answer with the answers given at the end of this Unit.

.....

.....

.....

.....

.....

17.4 PUBLIC LIBRARY SCENARIO IN USA

Public libraries in USA are considered as symbols of community spirit and the American faith in education. Their basic services, techniques and professional credos are essentially similar; and they offer through technology and co-operative agreements myriad materials and information far beyond their walls. The combination of scholarly, humanistic and historical contribution of public libraries not only contribute a lot in the social and civic structure, but also play a pivotal role in the emerging national information infrastructure. There is a rapidly changing environment for public libraries due to increased sophistication in the use of the Internet. They show significant amount of resources being deployed by public libraries to establish and maintain an information infrastructure to support the use of Internet and other

information technologies. Public libraries are making significant and widespread advances both to connect to the Internet and provide a range of network-based services and resources to their communities. The different types of services provided, use of Internet services and public access technologies that public libraries make available to patrons are mentioned below:

- a) Public libraries provide some types of public access Internet services. However, libraries do not provide public access equally to all services
- b) Public libraries provide public Access Newsgroup
- c) Public Access FTP Internet Services
- d) Public Access Text-based World-Wide Web Internet Services
- e) Public Access World-Wide Web Internet Services
- f) Public Access Online databases
- g) Public Access Online CD Services
- h) Public Access Online Reference Services
- i) Public Access to Special Software/Hardware for Individuals with Disabilities.

Besides, Public Libraries today support the role of the public library in society literacy programmes. American Library Association (ALA) is committed to reveal adult life long learning and literacy has been identified as among the most important values of the professional. The Twenty-First Century Literacy initiative is one of the American Library Association's "Key Action Areas".

For adult learners, public libraries are places where they can learn and practice new skills. Most public libraries provide information and referral about literacy programs in their communities. About one in three public libraries sponsors literacy programs for adults to improve their reading skills. These include one-to-one tutoring, small group instruction and programs to help immigrants improve their English literacy skills. A growing number of public libraries also sponsor family literacy programs. These programs aim both to help parents improve their reading skills and to help them raise children who are readers and lifelong learners. Some libraries have closed-captioned and audio descriptive videos for people with hearing and vision disabilities. Many libraries have books on tape and other alternative formats for those learning English as a second language, or who have print or learning disabilities.

Public Libraries in Bridging the Digital Divide

Public libraries in USA are playing a pivotal role in bridging the digital divide between the technological "haves" from the "have-nots" by connecting Public Access Computers (PACs) to the Internet, providing access to information regardless of format. Secondly public libraries in the recent technological sophistication provide opportunity to develop the computer skills through productive software on PACs, along with the Internet. Learning to use technology gives people "a certain level of self-confidence". If one is unable to use information due to illiteracy, the library is considered to have failed from fulfilling its mission to all members of Society. In order to move towards the goal of universal information access, the library must offer not just literature, but also the means to become literate.

Self-Check Exercise

- 3) How do public libraries in USA play a pivotal role in developing learning skills for all members of the society?

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

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

.....

.....

.....

Public libraries play a vital role in the lives of Canadians, and are extensively used by Canadians from coast to coast. It is believed that libraries enhance the lives of Canadians. The public library has a meaningful role to play as the information age continues to challenge us. Now more than ever Canadians need information for success at work, at school and at home. Libraries can help to find answers to many questions: where to live, how to plan and get a job (from job skills to resumes and the job interview process), what to buy, where to travel, what university or college to attend, and where to find up-to-date health and legal information. Given the increasing importance of information, the last few decades have witnessed demonstrable, sometimes dramatic, increases in public library use.

The Value of Public Libraries in Canada

Information is vital to the success of organizations and businesses, workers and supervisors, employers and employees, students, teachers, researchers and public at large. The acquisition of information is not an easy process. Public libraries are well positioned to make information (in many formats) available and accessible to the broadest possible community and do so in a timely fashion. The value of public libraries as understood by Canadians is explained below.

a) Public Libraries Cost-effective information providers

Public Libraries provide a wealth of information resources and services in a timely and cost-effective manner and so save people time and money and help to contribute to better decision-making. Information is an increasingly valuable tool, yet Canadians have less discretionary income to spend on information resources. Therefore public libraries are well positioned to play an active and important role in the ever-developing information era. Public libraries are effective vehicles for ensuring that Canadians have the information they need to make wise decisions leading to economic success.

b) Public Libraries Contribute to the economic well being of local business

There has been mounting evidence that public libraries bolster the local economic prosperity of the communities they serve. The community's economy benefits when business people use library resources to make wise business decisions, employees use them to improve their job skills or the disadvantaged use them to help break the cycle of poverty. Public libraries increase the potential profits of nearby businesses and which in turn on increases the economic success of the local community and the productivity and economic growth of the nation as a whole.

c) Public libraries improve the market worth of a community

Public libraries offer learning opportunities in a neighbourhood, which stimulates the positive growth of people and reduces the risk of crime, drug abuse and other undesirable and expensive problems. Public libraries increase the economic value of a community by their capacity to draw business, homebuyers, tourists through the purchase of goods and services.

d) Public libraries provide high-skill and high-tech jobs

Public libraries provide jobs for thousands of Canadians. The jobs provided in many libraries are those that are critical to the success of our changing economy, with staff that is familiar with an automated workplace, skilled in customer service and highly trained in the most current technologies and applications. Each of these employees contributes to the Canadian economy by paying taxes and purchasing goods and services.

e) Public libraries support the cultural industry sector

Public libraries support Canada's cultural industry sector. Nothing demonstrates the success of the relationship between public libraries and the book trade. Canada's cultural industry sector is defined as newspaper, periodical and book publishing, recording,

radio, television and theatrical film etc. Public libraries are a vital link in supporting those individuals and institutions involved in the creation, production and dissemination of print, audio-visual and electronic materials.

f) Public libraries support Canadian culture

Public libraries are an indispensable part of the cultural fabric, since libraries not only purchase items written, illustrated, designed and performed (and sold) by Canadians, but also make this culture available to the broadest possible spectrum of Canadians. The existence of public libraries helps to ensure that Canadian culture continues to flourish and thrive. Indeed, the value of finding public libraries and other cultural and artistic enterprises is linked to the project of creating a national identity and fostering a greater sense of national unity.

g) Public libraries support a democratic society

The access to information that public libraries offer to Canadians, regardless of race, class, income, age or gender, assists in supporting and encouraging democracy and improves the quality of citizen's lives. A citizen's access to information is an essential component of an effective democratic process. Canadian public libraries are the major distribution channel of government documents to the public. Through the Depository Services program, libraries receive government information. "By using the infrastructure of the library community to provide access, the federal government guarantees long-term and wide-spread availability of information".

h) Public libraries support and promote literacy

Public libraries play an active role in national efforts to increase the literacy skills of Canadians. They do this by supporting cradle-to-the-grave literacy through literacy collections, materials, programs and performing efforts. The majority of libraries offer pre-school story-time programs, school visits and summer reading clubs, all of which foster a love of reading. Public libraries, along with other educational organizations, provide a wealth of resources and services that advance the literacy skills of Canadians young and old.

i) Public libraries support Children and students

There is an inextricable relationship between the formal education system in Canada and the informal lifelong-learning resources provided by public libraries. Public libraries in Canada offer students and children a wide array of resources including print, audio-visual and electronic materials, access to technology and pre-school programs that serve to complement the resources made available to students in formal academic environments. Canadians feel strongly that the public library's role in educating children and students should be a top priority.

j) Public libraries support lifelong learning

Public libraries are a lifelong learning resource for all Canadians. It is essential in the new economy that people be informed and to continually upgrade their work and life skills. Many countries, in the hope of improving their economic health and the human condition of their citizens, are promoting the development of basic skills and lifelong learning. Canadian resources and services offered by public libraries aid the acquisition and improvement of personal skills, competence and knowledge and foster personal creativity, motivation, confidence and self-improvement.

k) Public libraries help people to make informed personal decisions

The lifelong learning needs of users are not limited to the workplace dynamic. The library plays an essential role in providing for the information needs of people in search of answers to 'real' life questions, health concerns, personal development and enrichment, family crisis and other pressing issues.

- 4) Describe briefly the impact of emerging technologies on public libraries in Canada.

- Note:*
- Write your answers in the space given below.
 - Check your answer with the answers given at the end of this Unit.

.....

.....

.....

.....

17.6 SUMMARY

It may be summarized from the previous discussion that the public libraries scenario in India, UK, USA and Canada may be viewed on the basis of its socio-economic circumstances. The present scenario in India is quite different from developed countries like UK, USA and Canada. The main reason of this wide disparity is the application of information and communication technologies. Public libraries are well placed in these countries to help bridge "the digital divide" by providing public access to information, teaching basic computer skills and by participating in programmes to combat illiteracy. In becoming the gateway to information and knowledge, public libraries are still facing major challenges to continue their services.

17.7 ANSWERS TO SELF CHECK EXERCISES

- 1) The different measures taken by state government are: (1) Enactment of public library Act (library legislation) and availing the matching and non-matching assistance provided by RRRLF. Those states that have not enacted Public Library Act, besides their own limited resources, they also get financial support from PRRLF. The central Government established PRRLF in 1972 with an objective to promote public library services in the country by providing both matching and non-matching assistance for a number of programmes.
- 2) The major changes in the role of public libraries are due to application of information of Technology. This has brought revolutionary changes in the quantity and quality of information and knowledge to be readily and speedily available to the public. Providing access to knowledge, imagination and learning is considered as the central role for public libraries. Public libraries have been recognized as the key agent in enabling people of all ages to prosper in the information society helping them acquire new skills for employment, use information creatively and improve the quality of their lives.
- 3) Public libraries in USA play a pivotal role in the emerging national information infrastructure in bridging the digital divide between the technological "haves" and "have-nots" by connecting public Access Computer (PACs) to the Internet and providing access to information. This certainly requires developing the computer skills of all members of the society to achieve a certain level of self-confidence.
- 4) Public libraries and Emerging Technologies have prevented the division of Canadian society into information 'haves' and 'have nots'. The emerging information and communication technology particularly Internet access is not only limited to people and businesses with discretionary income but here the libraries are well positioned to bridge the economic gap. The public library ensures the information highway is accessible to all Canadians. They are located in almost every community in Canada, and are obvious public access points to the information highway. Lack of access to the Internet and other emerging technologies will have costly economic and social repercussions. The availability of these technologies at public libraries, along with trained and experienced professionals to assist users shall result into many benefits, from traditional, social and cultural values, to strong economic values.

17.8 KEY WORDS

- Information Infrastructure** : Aspects of society that provides information transfer facilities such as publishing, education, information services etc.
- Digital Divide** : Gap between information haves and Information have-nots, (Those who can effectively use and can not use new information, communication tools such as Internet).
- Information Society** : A view of the society in which global communication is available and in which information is produced on a large scale, distributed widely and becomes the dominant driving force of the economy.
- Online** : Using devices and peripherals which are interacting directly and simultaneously with a computer central processing unit.

17.9 REFERENCES AND FURTHER READING

- American Library Association (2001). ALA Action No.1: 21st Century Literacy at your Library. Chicago: American Library Association.
- American Library Association (1997). The 1997 National Survey of US. Public Libraries and the Interent: Final Report. Washington, DC: Office for Information Technology Policy.
- Batt, Chris, (1998). Information Technology in Public Libraries. London Library Association Publishing.
- Bhattacharjee, R. (2002). Public Library Services in India: Systems, Modernization, Networking and Deficiencies. National Round Table in Modernization and Networking of Libraries in India. New Delhi: Developing Library Network
- Kathleen de la Pena Mc Cook and Peggy Barber. Public Policies as a factor influencing adult life-long learning, adult literacy and public libraries, *Reference and User Services*, Vol. No. 42, 2002.
- Leslie Fitch and Jody Warner. (1997). Dividends: The value of public libraries in Canada. Toronto: The Library Action Committee of the Book and Periodical Council, 1997.
- Martyn John and Others (Eds.),(1990). Information UK 2002. London: Bowker.
- Patrick Villa (Ed.) (1999). Information and Libraries in the United Kingdom-2000. London: The British Council.
- Redmond Kathleen Molz and Phyllis Dain. (1999). Civic Space/Cyberspace: The American Public Library in the Information Age. London: Cambridge.
- Rath, P.K. Library legislation and the changing role of public libraries in 21st century. Library Movement in India after Independence: Problems and prospects. Proceedings of the National Seminar, 5-6 April, Directorate of Public Libraries, Government of Tamilnadu, 1999.
- RRRLF. Recommendations of the Seminars on public library scenario in 21st century. RRRLF Newsletter, vol. XVII (3 & 4), and XVIII (1), 1997.

NOTES





ignou
THE PEOPLE'S
UNIVERSITY