
UNIT 6 TYPES AND FORMS OF CATALOGUES

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6.0 OBJECTIVES

In Unit 5, you have learnt about the definition, objectives and functions of a library catalogue. In this Unit you will know about the forms of a library catalogue. After reading this Unit, you will be able to:

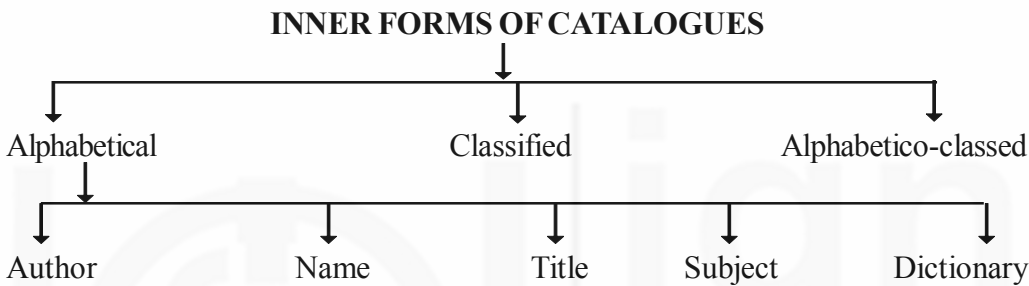
- discuss the different forms of a catalogue;
- compare their relative advantages and disadvantages;
- explain the criteria to select the best form of a catalogue; and
- discuss the features of a computerised catalogue.

6.1 INTRODUCTION

A library catalogue has a long history of one and a half century. It has evolved over the period of time. The evolution has taken place in the form, format as well as contents of a catalogue. Developments in document production and changing user needs have affected the library catalogue. Information Communication Technology (ICT) has also played a role in the developments in catalogues and cataloguing. A catalogue is discussed from the point of view of its external form/ physical appearance and internal form. The different forms have been discussed with their relative advantages and disadvantages in this Unit.

6.2 INNER FORMS OF A CATALOGUE

The inner form of a library catalogue refers to the arrangement of a catalogue entry in a logical and systematic order to fall into a helpful sequence for storage and retrieval. The chart below depicts the various inner forms of a catalogue.



There are three types of inner forms of a catalogue, viz. alphabetical, classified and alphabetico-classed. Author, Name, Title, Subject and Dictionary catalogue fall in the category of an alphabetical catalogue. A Classified Catalogue is so named because it is arranged in a classified order. Classified order is an artificial order which may be difficult to use. Hence a classified catalogue has two parts the other part being alphabetical which is easy to use and leads the user to the classified part. Alphabetico-classed catalogue is a variation of the classified catalogue. It overcomes the shortcoming of the artificiality of a classified arrangement by making it classified alphabetically.

Self Check Exercise

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

1) Define the inner forms of a library catalogue.

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2) Enumerate different categories of inner forms of a library catalogue.

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6.2.1 Author Catalogue

Author is the person who is chiefly responsible for the intellectual thought content of a work. In simple words, author is the creator of a work. In an author catalogue, the entries of documents are under author's name and arranged alphabetically. It provides access to documents by the names of their authors. In other words, the leading section of an author catalogue would comprise the name of an author. An author is generally a person or a corporate body who is responsible for the thought contents of the document brought out under the name. Listing of personal names of author varies greatly because of the cultural traditions in the naming of person in different regions of the world. For example, names of persons in Western countries, Indic names, Muslim names, Chinese and Japanese names differ as per their own traditions. Which part of the names should be taken as the lead in a catalogue has been set by cataloguing codes and there are established practices. There are also a variety of corporate bodies under whose names documents are published. Although we are not concerned very much with rendering of names in catalogue entries here, it is important to note that their filing position is determined by the rendering of names. Inaccuracies in the rendering of names would seriously affect the alphabetical arrangement of entries in the catalogue.

The catalogues of the British Library, the Library of Congress, the National Library of India are some of the fine examples of author catalogues.

Libraries may have author catalogues arranged in three different ways: a) There may be an exclusive author catalogue without entries mixing it with any other entries such as titles, subjects, series, etc. b) Author entries may form part and parcel of a dictionary catalogue. c) Author entries may form part of the alphabetical index of a classified catalogue. Irrespective of the form in which an author catalogue exists, it provides an important approach to a document. If the user approaches the catalogue with the correct name of an author, the catalogue immediately gives the person all the documents by the author. To help a user, the other variants of the name of an author are usually provided as cross-references in a catalogue.

Advantages

- 1) It brings together the titles of books of the same author at one place in the catalogue
- 2) It helps a user to obtain at a glance what books are available in the library by a given author. This function, can however be fulfilled by author entries in other inner forms of a library catalogue. In a classified catalogue, this function is performed by the alphabetical index of dictionary part.
- 3) It ensures that there will be no scattering of works of the same author through the catalogue.

Disadvantages

- 1) Approaches of readers under subject, collaborators, distinctive titles etc. cannot be satisfied.

However it requires that the reader must know the exact name of the author and title. In case the author is known by different forms of name or pseudonym, the reader may be helped with the use of see references.

6.2.2 Name Catalogue

A name catalogue is a variation and extension of an author catalogue. It contains entries for works of one author and also for books written on him. All entries are arranged

alphabetically by the name of the author. In other words, a name catalogue is a compound or mixed type of catalogue which combines the author and subject entries (the subject entries representing the author as a subject) into one alphabetical sequence. In this type of catalogue autobiography, biography and other critical studies, memoirs and diary of an author, are arranged along with his original work. The author entries include:

- corporate authors, both as an author as well as a subject
- name series
- place name forming part of an author heading

The following examples, exemplify these points:

Person as an author	Nehru, Jawaharlal: Discovery of India Nehru, Jawaharlal: Glimpses of World History Nehru, Jawaharlal: Towards Freedom Autobiography of Jawaharlal Nehru
Person as subject	Jawaharlal Nehru, Political Biography by F. Moraces Jawaharlal Nehru: Biography by S. Gopal Nehru: the Making of a Nation by M.J. Akbar
Name Series	Oxford Historical Series Madras University Sir C.P. Ramaswami Aiyar Endowment Lecture Series
Place name	Bombay University Calcutta University

Name catalogue serves as an author catalogue and also as a subject catalogue. Any reader interested on the works by or on an author may find this type of catalogue very useful to find specific material of his interest. In this type of catalogue, one can find the works of Rabindra Nath Tagore as well as works on him arranged in a single alphabetical order under Tagore.

Name catalogue seems to be almost confined to Great Britain. Such a catalogue outside Great Britain appears to be rare. The catalogue of the British library is near name catalogue which includes references from all names that occur in titles.

Advantages

- 1) It is useful and valuable for collection of books of an author and books on her/him.

Disadvantages

- 1) Subject entries are limited to personal and corporate names only.
- 2) There is no title entry in this form of catalogue so also under collaborator and series.

Self Check Exercise

- Note:** i) Write your answer in the space given below.
 ii) Check your answer with the answer given at the end of this Unit.
- 2) State the essential difference between an author catalogue and a name catalogue in two lines.

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6.2.3 Title Catalogue

In a title catalogue, the titles of documents occupy the leading section of entries, which are arranged in an alphabetical order. Queries of readers who remember only the exact title can be answered with the help of a title catalogue. However, it is noticed that many of the readers do not spell out a title exactly the way it appears on the title page, particularly non-fiction titles. To fulfill title approach of readers, entries can be selectively provided in catalogues of public libraries for fiction and for those that are well-known by their titles. It is a part of dictionary catalogue or part of author-title index of classified catalogue. For books in classical language particularly Sanskrit and Pali, this catalogue is somewhat preferred.

Advantages

- 1) Satisfies the approaches of readers especially in cases for classical languages and for fiction, drama, poetry and for the class literature.

Disadvantages

- 1) It cannot alone satisfy all approaches of the readers except the title approach.

6.2.4 Alphabetical Subject Catalogue

It is a list of books in a collection, each entered under the name of the specific subject as a heading, the entries being arranged alphabetically. Several books on the same subject will be brought together in the catalogue. When there is more than one book on one subject, the author of the book is taken to determine the alphabetical order. If the author's name is common for several books, then the title of the book is taken in to account for arrangement of entries. The sample example of this type of catalogue is given below:

CHEMISTRY ORGANIC

Bahal, B S

Text book of Chemistry

DOCUMENTATION

Mukherjee, A K

Fundamentals of Special Librarianship and Documentation

Ghosh, Alok

Indian Economics

This form of subject catalogue is called an alphabetical subject catalogue as the specific subjects are arranged alphabetically. If a reader approaches the catalogue with a view to find book or books on a specific subject it provides excellent service as s/he has to refer to it like dictionary. However if at all reader wants to see all the materials on a field of knowledge systematically, the catalogue fails to respond to his query i.e. a book on BOTANY will be separated from books on ZOOLOGY. Similarly books on CHEMISTRY will be separated from books on PHYSICS. Hence a reader has to look under separate headings at different places in the alphabet if all the materials available on a given field of knowledge are to be gathered.

Features

- i) The primary function of this catalogue is to know what books are there on a particular subject in the library.
- ii) In this catalogue, entry is to be made under specific subject term which represents the specific subject matter of the book.
- iii) This catalogue is made under specific subjects and again arranged in alphabetical order that is why it is named as alphabetical subject catalogue.
- iv) This catalogue is prepared with the help of a Standard List of Subject Headings like Sears List of Subject Headings or Library of Congress List of Subjects Headings for consistency, uniformity and standardisation.

Advantages

- i) With the help of this catalogue, the specific subject approach of the readers is satisfied.

Disadvantages

- i) The related subjects are scattered throughout the catalogue owing to their alphabetical arrangement.
e.g. Money and Banking, Electricity and Magnetism, Astronomy and Planet etc.
- ii) The Standard List of Subject Headings fail to cope with the ever emergence of new subjects and the new editions have to be brought out regularly; otherwise the catalogue is unable to assign exact subject headings for newly published books.

Self Check Exercise

- Note:**
- i) Write your answer in the space given below.
 - ii) Check your answer with the answer given at the end of this Unit.
- 4) Give ten example of subject headings. Illustrate how an alphabetical subject catalogue scatters related subjects.

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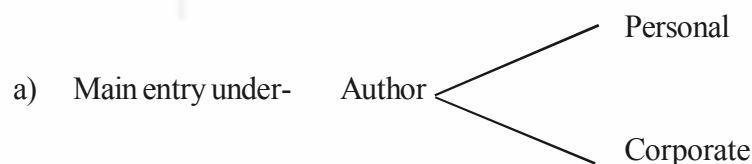
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6.2.5 Dictionary Catalogue

It is a catalogue in which all the entries (authors, title, subject, series etc.) and their related references are arranged together in one alphabetical reference. It resembles arrangement of entries in a dictionary where the words are strictly arranged alphabetically. The various entries of this catalogue are arranged just like a dictionary that is why it is called dictionary catalogue.

Features

- i) It is a mixed type of catalogue, where we find two distinct approaches merged together. It is a combination of two distinct and different approaches, the author and title approach for the reader who knows the book by the author s/he wants, the subject approach of the reader who does not know either the name of author or title of the book but wants material on some definite subject.
- ii) As a result of this type of arrangement quite unrelated headings will come together and related headings will be dispersed (e.g. classification and cataloguing; flowers and rose will be dispersed.)
- iii) It takes its name from its arrangement which follows the simple alphabetical order of entries.
- iv) So far the subject entries are concerned, it follows the principle of specific subject heading. It should be entered under the specific subject.
- v) Dictionary catalogue provides an elaborate scheme of cross reference to bring together scatted related subjects and to correlate and unify the entries in order to bring systematic and logical order.
- vi) A dictionary catalogue with cross references is called syndetic or connective catalogue.
- vii) A dictionary catalogue is divided into two files; one for author, title, series and collaborator entries and another for subject entries.
- viii) Different types of entries in this catalogue are:



and

- Title

- b) Added entries under – Joint author, Translator, Editor, Compilor, Title, Series and
- c) Subject Analytical entries – In case of collections of papers like conference and seminar proceedings article of journals etc. Author, Title and Subject Analytical entries are to be prepared.
- d) Cross- reference – These are of two types, viz. (1) ‘see’ reference and (2) ‘see also’ reference from unused to used headings and from specific subject to general subject from narrower term to broader term(e.g. Roses see also Flowers) respectively.

Advantages

- i) It is the most popular form of catalogue used in public, school and college libraries, and even in university libraries. Its popularity is due to its arrangement like a dictionary i.e. in alphabetical order.
- ii) It can satisfy the different specific needs of the readers.
- iii) The users need not be aware of class numbers to refer this catalogue.
- iv) With the help of cross references and general references, readers are guided from one heading to another heading.
- v) Direct approach on any specific subject can be satisfied easily e.g. if a reader wants books on “CRICKET” he will refer the catalogue directly under this term and at once know all the books available on “CRICKET” in the library.

Disadvantages

- i) For readers who need information on a subject with all its ramifications, the dictionary catalogue is most difficult to use. It is slower in yielding information and less satisfactory in its result than the classified form.
- ii) Extensive use of cross references to bring together the related subjects together results in the catalogue becoming bulky. Its maintenance is more difficult. Moreover the cross references often proves to be tire some.
- iii) It is a tedious and time consuming affair on the part of the readers to find out information on the various aspects of a particular subject and its related subjects from this catalogue.
- iv) Dictionary catalogue suffers from all the consequences of excessive dependence on verbalisation.
- v) Replacing the old subject terms by new subject terms is a tedious and time consuming process.

The sample of Main entry of Dictionary Catalogue is given below

Call number
541
Pk4 Palit, S R
Text book on physical chemistry/ by S.R. Palit . – 2 nd ed. – Calcutta: Asia Publishing House, 1964.
Acc no XX, 245p. : ill. ; 22x12cm.

Self Check Exercise

- Note:** i) Write your answer in the space given below.
 ii) Check your answer with the answer given at the end of this Unit.
- 5) Write six examples of your own, illustrate how the distributed relatives get collected in one place in a dictionary catalogue.

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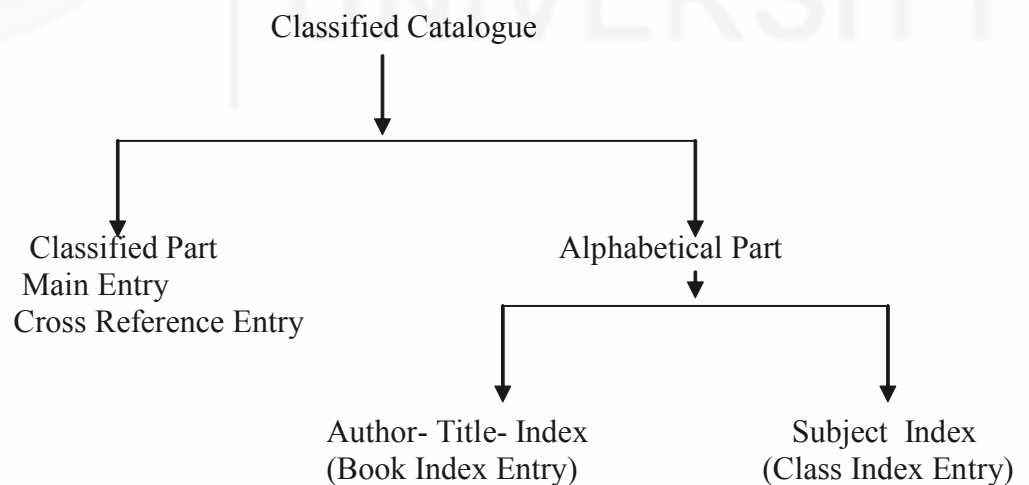
6.2.6 Classified Catalogue

Classified catalogue provides access to information by subject. It is different from an alphabetical catalogue in that the arrangement is by class numbers. It brings in an artificiality as the user is expected to be aware of the scheme of classification. To help the user, a classified catalogue is in two parts, the other part being alphabetical in nature that guides the user in navigating through the classified part and reaching the desired information.

Definition

According to Encyclopaedia of Librarianship, it is “ a catalogue of subject entries arranged in the systematic order according to a scheme of classification.”

Dr. Rangnatham defines it as, “ a catalogue in which some are numbered entries and some are word entries”. Consequently a classified catalogue consists of two parts (i) the classified part and (ii) the alphabetical part.



Classified Part

It is the arrangement of entries of documents by class number that gives the systematic and structured display of subjects in a classified catalogue. It maps out the subordinate and coordinate subject divisions and puts them in a logical sequence. This systematic arrangement to a certain degree reflects the logical thinking of specialists in different subjects and gets their appreciation.

While displaying the entries in a classified catalogue merely giving the class numbers would not be very helpful to users of the catalogue. The class numbers are not intelligible to persons who have no knowledge of the classification scheme chosen for the library. Therefore, while displaying the class numbers in guide cards, for entries under them, it is absolutely necessary to give their verbal equivalents of the divisions of class numbers. These verbal equivalents provided for class numbers in a classified catalogue are known as 'Feature Headings'.

Alphabetical Part

The alphabetical index to a classified catalogue, consisting of author, title(wherever necessary), subject entries and other entries for collaborators, series, editors of series and a host of cross references, is meant to support the classified part of the catalogue. It can fulfill all the functions of a dictionary catalogue i.e. collect the works of an author together, bring all the different editions of a title, cross reference for subjects, etc. With the classified part bringing all the related subjects together, and the alphabetical order bringing together all the distributed relatives, the classified catalogue can fulfill all the functions of a library catalogue.

Features

- 1) It is a subject catalogue where entry is made under the class number which represents the subject matter of the book.
- 2) It consists of two parts, namely the classified part (the number entries) and the alphabetical Part(the word entries) where the entries are made and arranged according to alphabetical order.
- 3) The success of this catalogue depends upon largely on the soundness of the classification scheme chosen and the extent to which subjects are collocated in that scheme.
- 4) As the classified catalogue is based on some classification scheme, all the entries are arranged from general to specific at all levels in this catalogue.
- 5) Any shortcoming in the scheme of classification reflects in the catalogue when the subject entries are prepared by the chain indexing from the class number of the document.

Advantages

- 1) In classified catalogue, the main entry not only falls under the subject with which a book deals, but it falls in close proximity with related subjects.
- 2) The logical or systematic arrangement of subjects is assumed because the catalogue is based on a recognised system of classification.
- 3) The close identity of arrangement between catalogue entries and books on shelves tends to increase the readers' familiarity with a large number of books.
- 4) It discloses the strength and weakness of a library by subjects, broad and specific.
- 5) It is easy to bring out printed parts of a classified catalogue, class by class with a consolidated index at the end of the volume when the parts are printed.
- 6) Specific sections of classes of the classified catalogue in a large library with a fairly balanced and representative active collection can be used as relative subject bibliographies.

- 7) The arrangement of entries according to notation of the classification scheme makes it independent of natural language which may lead to international standardisation and ultimately international cooperation.
- 8) A classified catalogue is very helpful for exhaustive literature search as it offers all possible approaches. The classified part satisfies the linear approach. In alphabetical part it serves multi-dimensional verbal approach.
- 9) More number of readers can consult the catalogue at a time because of the facility of separate catalogue cabinet both in classified and alphabetical part.
- 10) Changes in subject terminology do not seriously affect the classified catalogue. Only the subject index cards in the alphabetical portion needs to be re-filed according to changed terminology.
- 11) The index entries of a classified catalogue are easier to use and consult.
- 12) Arrangement of entries in the classified part is the same as that of books on shelves. Arrangement in the alphabetical part is like a dictionary, which is easy to understand. Arrangements of multilingual entries do not present difficulties in the classified part but in the alphabetical part, multilingual entries can present difficulties.

Disadvantages

- 1) In a classified catalogue, the reader has to consult the alphabetical part first then taking the call number he has to again go to classified part for detailed information about the document.
- 2) The success of this catalogue depends on the classification scheme chosen. Because if there is any drawback in the classification scheme, it will be reflected in the catalogue.
- 3) Revision of classification scheme necessitates revision of the relevant part of the subject catalogue.

Self Check Exercise

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

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

- 1) Bring out the differences between a dictionary catalogue and a classified catalogue with reference to the structure and provision for adding new subjects. Give your answer in a tabular statement.

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6.2.7 Dictionary Catalogue and Classified Catalogue : A Comparison

No 1.	Features/Aspects 2	Dictionary Catalogue 3	Classified Catalogue 4
1.	Arrangement	One single, alphabetical sequence of author, title, subject, etc.	Two parts i) classified part arranged according to class numbers and ii) alphabetical part. Arrangement of entries in the classified part is exactly the same as that of books on shelves and in the alphabetical part is just like a dictionary which is easy to understand and to use.
2.	Author and title filiations	Works of the same author, different editions of the same work, different translations of a work kept together.	The alphabetical index gets this filiations of authors and works.
3.	Subject filiations.	Related subjects get scattered because of alphabetical arrangement but can be connected by a system of cross references.	Presents a structured and organized arrangement of subjects, displaying their relations.
4.	Distributed relatives	All distributed relatives are collected and brought together.	The alphabetical index can perform this function.
5.	New subject	Can be inserted into the catalogue without any difficulty.	To be fitted properly in the subject filiation. There may be difficulties to position a new subject into the classification scheme without the permission of the designers of the classification scheme. It may also introduce an element of inconsistency.
6.	Specific subject.	Provides direct approach to users if he searches under a particular subject and need not required to know the classification scheme.	A reader has to consult alphabetical part first, then taking the class number, he has to refer the classified part then only he can get all the books on the subject.

7.	Classification as a basis.	Does not depend on any scheme of classification.	Success of this catalogue depends solely on the qualities of scheme of classification.
8.	Use of cross references.	Extensive use of cross references solely depends for its success. But ultimately becomes more bulky which poses problems for best use.	Number of cross references is less due to automatic presence of classified arrangement which brings related subjects together.
9.	Ease of use.	Simple, ease and straight forward, a direct search is sufficient to find any kind of information.	Two step search is necessary. It does not require complete knowledge but by providing elaborate guide cards will help for best use.
10.	International cooperation.	Difficult to achieve.	Possible if UDC is used with its multilingual indexes which facilitates literature searches for foreign language literature.
11.	Printing.	Cannot be done in parts.	Printing of subject is possible, as a result a number of subject catalogues can be produced.
12.	Compilation of bibliographies.	Not very convenient to compile subject bibliographies	Very convenient for the preparation of subject bibliographies.
13.	Strength of collection.	Not possible to know the exact strength or weakness of a particular subject.	Can be easily assessed the strength of a subject and act as a book selection aid for book selector.

6.2.8 Alphabetico-Classed Catalogue

The alphabetico-classed catalogue may be considered as a combination or mixture of the best points associated with dictionary and classified catalogue. In other-words, it represents an attempt to combine some of the advantages of a classified catalogue with the directness and ease of consultation of the alphabetical catalogue. A catalogue with entries under broad subjects alphabetically arranged and sub-divided by topics in an alphabetical order. It is out and out a subject catalogue. It does not stand independently by itself as in case of dictionary catalogue. An alphabetico-classed catalogue provides alphabetically arranged broad subjects. Topics subordinate to the main subjects are listed as sub-divisions. The references needed from specific headings e.g.

MNEMONICS

See

PHILOSOPHY—PSYCHOLOGY—MEMORY—MNEMONICS

“A catalogue of this kind consists of an alphabetical sequence of mutually exclusive broad subject headings, under each of which appears of further alphabetical sequence

of sub-headings, the process of alphabetical divisions can be carried down to the degree of minuteness required by the material being catalogue” (E.J. Coates). The rearrangement of D.D.C. division of 600 Technology in an alphabetical order would yield the following:

Agriculture and related technologies (630)

Building (690)

Chemical and related technologies (660)

Engineering and allied operations (620)

Home economics and family living (640)

Management and auxiliary services (650)

Manufactures (670)

Manufacture of product for specific uses (680)

Medicines (610)

Diseases (616)

of blood- forming, lymphatic, glandular system(614.4)

cardiovascular system (616.1)

digestive system (616.36)

of biliary tract (616.36)

of mouth and throat (616.31)

This type of catalogue must have alphabetical index of specific subjects for its successful operation.

As will be seen from the above examples, the alphabetic-classed catalogue gets related subjects together in a way, but their alphabetical arrangement takes away the filiations of subjects. There are few examples of such catalogues today, because compromises are never entirely successful.

Parts of the original museum subject index use the alphabetic-classed principle.

Advantages

- 1) In this type of catalogue there is an attempt to incorporate the advantages of dictionary and classified catalogue with the simplicity of an alphabetical arrangement broad subject headings where again sub-divisions are arranged alphabetically.

Disadvantages

- 1) It is a complex type of catalogue and see references are made from the specific heading to the complex heading.
- 2) Subject headings are complex creating confusion for the reader .

Self Check Exercise

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

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

- 7) List any five criteria for choosing an inner form of a library catalogue for a library.

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6.3 CHOICE OF INNER FORMS OF CATALOGUE

The essential requirements in the choice of an inner form of catalogue are:

- i) A good library catalogue should satisfy the different approaches of the readers.
- ii) Works of same author or collaborator or on the same subject should come together.
- iii) The catalogue should be logically constructed so that closely related classes should be brought together.
- iv) It should be prepared in such a way that a reader can easily understand without much trouble.
- v) The catalogue should be selected keeping in mind the type of user community, their information needs and nature of documents.
- vi) The library must provide a user- oriented catalogue.
- vii) Technical soundness of particular inner form; open or closed access system adopted; the range of services to be planned and financial position of the library.

6.4 OUTER/PHYSICAL FORMS OF CATALOGUE

In Section 6.2 you have learnt about the various inner form of catalogues, their features, advantages and disadvantages. Also you must be aware of the factors to be considered in selecting an inner form of catalogue for a library.

However, now let us discuss about the different types of physical forms of catalogue including their relative requirements i.e. the criteria for selecting the best possible catalogue which can be used conveniently by the maximum number of readers leading to least cost for its presentation and occupying less space.

In due course, you will be able to know the importance of some of the catalogues in the libraries of 21st century. You can also understand the relative merits and demerits of such catalogues and the reasons for choosing a specific one for a particular type of library. Most of these forms have historical importance since the scenario has changed with use of computers in cataloguing.

6.4.1 Criteria for Selection of the Best Physical Form of Catalogue

In the recent past, due to advent of IT, most of the libraries are in the process of computerisation and developing computerised catalogues. However, card catalogue still exists and in operation especially in colleges and university libraries. Whatever physical form a catalogue may have, it should possess all the features of the most suitable catalogue, if not all, the selected physical form should have most of the following criteria for its choice.

- Should be possible to keep it up to date which implies that one should be able to insert or withdraw entries easily as and when required. It means the catalogue should be flexible in nature.
- To bring like entries together i.e. on the same author and same subject.
- It must be easy to use and should be possible to consult it inside or outside a library. This is related to portability.
- Should be economical to produce and maintain and should have facility for making number of copies.
- Must be compact in size, so that it does not occupy much space.
- Should provided multiple access points and save the time of the readers so that at a time more number of readers can use this catalogue.

6.4.2 Bound Register Form

In this form, the entries of documents of a library are written in hand in a bound register or ledger. The information about each document like author, edition, accession number, number of copies and class number is provided and separate registers for author, title and subject can also be prepared.

Advantages

- i) The ease with which readers can use this catalogue is unquestionable
- ii) Xerox copies of the catalogue can be placed at different locations in libraries facilitating the readers to consult the catalogue in any corner of the library so that at a time more number of readers can use it because it has the quality of portability.
- iii) Several entries that can a reader see on a page at a time without the necessity of turning one card after another is definitely an added advantage which saves precious time of the readers. Some times a card may be skipped up while consulting hurriedly.
- iv) It needs neither much space nor special equipment for its display due to its compactness.
- v) Since the readers are in the habit of reading and consulting the books from childhood, they feel it much more convenient to consult being like a book.

Disadvantages

- i) It does not possess the quality of flexibility hence when new books are added, entries cannot be filed in their appropriate places as the left out space is filled soon. Hence such books will be entered at the end of the register or a supplementary catalogue is prepared which is a delaying process. Addition of books is an inherent feature of a library this catalogue is unable to keep good company as one is fast, the other is slow.
- ii) It cannot be kept up to date.
- iii) The quality of paper is not thick as the card catalogue; hence its durability is less and cannot with stand constant use by the readers.
- iv) In case of stolen, damaged, tornout, mutilated and outdated books are to be discarded, then immediately the relevant entries are to be deleted from the catalogue which looks confusing and indecent.

6.4.3 Printed Book Form

It is a catalogue of books and other reading materials available in a library bound in a volume or volumes where entries are printed on pages. It is also known as printed page catalogue or bound book catalogue. These are prepared in conformity with standard principles and rules of cataloguing. Some of the big libraries like British Library, the Library of Congress, National Library, Kolkata, Glasgow and Liverpool Catalogues printed their catalogues in the book form. To keep the catalogue updated, they regularly issued supplements to these catalogues.

Advantages

- a) Since this catalogue resembles the printed reading materials, it creates less psychological barrier to the readers for use as they are familiar with the conventional printed books.
- b) Speed of search is fast as compared to other form of catalogues.
- c) Multiple copies of this catalogue can be made on demand and can be sold so that readers can consult the catalogue at home and hostels comfortably.
- d) No thoughtless and careless reader can make any alteration in the pagination or in the order of arrangement of entries. The volumes of it can be kept on a table without any special equipment and easy to handle. In this context, Gellar has said that, “the printed book catalogue are an active, positive salesman for its service, an effective display window for its merchandise and as an instrument by which it has been able to improve professional service to the public. Experience shows that the printed book catalogue is attractive psychologically to the public, and that it is easy, simple and conventional to use. There are no long trays to pullout and pull back.....”
- e) In small libraries, it is considered economical to use this catalogue as in such libraries, books are added in small numbers. Subsequent, supplementary catalogues can be prepared.
- f) Easy to consult as a reader can have a glance of many entries on one page.
- g) It does not occupy much space.
- h) Can be segmented to various sections and can also be issued subject wise to satisfy the needs of different subject groups of users.

Disadvantages

- i) Insertions and withdrawal of entries or deletion is not possible as it is not flexible.
- ii) It is high expensive for its production, issue of supplements takes much time hence it cannot be kept up to date.
- iii) Printing of the catalogue consumes a lot of time and in the mean time new books are acquired by the library whose entries cannot be included, as a result, the information about such books cannot be brought to the notice of the readers. As such the catalogue cannot indicate the complete collection.

6.4.4 Sheaf Form

Sheaf form of library catalogue is also known as loose-leaf form. A sheaf form of catalogue is one in which slips of paper are put into a loose-leaf binder and bound by

some mechanical device into a volume. This is a loose-leaf binder format, which provides the convenience of handling a book. In the sheaf form, each entry is made on a separate slip. But, there may also be more than one entry on each slip or page. The entries are either handwritten or typed. New slips can be inserted in appropriate places without disturbing the existing order of arrangement of entries. It is also possible to remove entries for specific documents in case such documents are withdrawn from the library stock. Roughly, each volume of a sheaf catalogue may contain about 500 to 600 leaves. The volumes so constituted may be displayed on special shelves with appropriate labels on their spines, indicating the order (either alphabetical or classified) of arrangement. At one time this form of catalogue became somewhat popular in countries like England and other European countries.

Advantages

- i) It combines certain advantages of book form catalogue like portability, familiarity and certain good features of card catalogue like up-to-dateness, infinite expanding capacity and freedom of manipulation of entries.
- ii) It is possible to bring like entries together i.e. books by the same author and on a specific subject.
- iii) Easy to consult and can be referred inside and outside the library.
- iv) Most economical to produce and can be kept in a small wooden/ steel rack resulting into occupying less space due to its compact nature.
- v) A mobile library collection may be entered in a sheaf catalogue and it can be carried in a van.
- vi) Duplicate entries can be made easily.

Disadvantages

- Since the size of clip is 7- $\frac{3}{4}$ by 4 inches/ the particulars of one document may be recorded resulting into wastage of space.
- The entries be struck off as and when the relevant document is lost, damaged or withdrawn. Otherwise, again the whole slip is to be re-written or retyped on the entire page.
- The filing and fixing of sheaves into loose leaf binder is a time consuming and tedious process as it involves unlocking and locking time and again. Hence it creates problems in proper maintenance of the catalogue.
- Those libraries that follow this catalogue cannot conveniently participate in any cooperative venture where unit cards are used for entries.

6.4.5 Card Form

Library catalogue in the card form is by far the most popular physical form. It is widely prevalent in libraries throughout the world including India.

In this form the bibliographical elements of every document are recorded on a single card. This method of representing every document on a single card is known as the unit card principle. These cards stand in card-trays or cabinets with a punched hole of about half a centimeter from the bottom for inserting a locking rod. This locking system keeps the cards from falling out and also prevents unauthorised persons from removing any card from the tray. Because of its wide usage all over the world, many aspects

pertaining to the card catalogue are standardised. For example, 12.5×7.5cm or 5×3 inches is the universally adopted size for a catalogue card. Similarly, the sizes of cabinets, trays for a card catalogue are all of uniform standard. Consequently, most of these items of furniture could be obtained readily from commercial vendors.

Advantages

Some of salient features, which made the card catalogue quite popular are:

- a) It is flexible in keeping it constantly updated with the quality of expansion and withdrawal of entries.
- b) The users and the library staff can handle it with ease.
- c) Possible to bring together entries with the same handling.
- d) The cards are single, self-contained units. This feature permits additional approach points and cross reference in the catalogue.
- e) The entries for lost books can be withdrawn and like entries can be filed together.
- f) The library using the card catalogue can participate in central and cooperative cataloguing scheme. This reduces the burden of the staff.
- g) The cards are hard and tough, so its durability is longer than that of other catalogues.

In fact, the unit card principle is one of the most beneficial outcomes of the card catalogue.

This principle paved the way for centralised cataloguing of documents at central place. The printed unit cards can be multiplied and distributed to other libraries at a fairly low price. The Library of Congress, USA, was the pioneer in starting this card service and many libraries in the United States and other countries use this service. The well-known commercial bibliographic publisher, H. W Wilson and Co. also provides printed catalogue card service to libraries, for selected items.

Cooperation in compiling bibliographic records is another extension of centralised cataloguing.

Libraries participating in cooperative cataloguing provide catalogue entries to the Library of Congress of those documents that are not available at the Library of Congress. The Library of Congress gets them printed for distribution, as part of its catalogue card service.

The British National Bibliographic (now incorporated with the British Library) from its very inception in 1950, assumed responsibility as a national cataloguing agency. Besides, its printed weekly and monthly edition and other cumulations, a printed card service was also made available on subscription to individual libraries. Now new records can be downloaded from its site.

Cataloguing-in-Publication(CIP)

Centralised cataloguing led to the logical step of publishing bibliographic entries of documents in the publication itself, on the reverse side of the title page. Ranganathan called it “prenatal cataloguing”. This facility enabled libraries to use the bibliographical data available on the book for the preparation of their catalogues. The Library of Congress was the pioneer in this enterprise. The British National Bibliography has also been participating in the CIP Programme from January 1977. Such facilities are yet to develop in countries like India.

Disadvantages

Though the card form of library catalogue is universally accepted. It also suffers from some disadvantages. Which stated as under:

- a) The card catalogue occupies large space in libraries. The problem of space is very acute in large libraries located in metropolitan cities. Libraries with a massive collection running into lakhs of documents with an annual addition of 10,000 volumes would need enormous space for its card catalogue. The cost of space is prohibitive in metropolitan cities and this has been a deterrent against continuing with the card catalogue in such libraries.
- b) The growth and complexity associated with the card catalogue call for greater maintenance cost and administratively unmanageable. Difficult to detect the lost card taken out by some careless and thoughtless reader .
- c) Due to inherent defects associate with the structure of a card catalogue, it is possible for a single person to monopolise a considerable number of trays at a time, precluding its use simultaneously by other users.
- d) It is not portable and hence the users has to go to the library for consulting it . This naturally leads to wastage of time of time, particularly if the library does not possess the documents of his interest.
- e) Speed of search is slower as compared with book form and sheaf form of catalogue.

Self Check Exercise

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

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

2) Enumerate the physical forms of a library catalogue.

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3) State two reasons for a card catalogue to be popular than printed book forms.

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6.4.6 Computer-produced Book Form

This type of book catalogue was produced with the help of a computer. The structure, extent of information about the document, typography etc. varied with that of conventional physical form of catalogues. The print out available used to be in the form of line printer output. Many institutes of repute like Library of Congress used to provide services like abstracting and indexing services including the production of catalogues by use of a computer.

Advantages

- 1) The cost of production of multiple copies was less because it is produced first by creating a master copy from which additional copies can be reproduced.
- 2) The maintenance cost was low since the whole catalogue display is recreated at intervals which facilitates the complete catalogue which can be reorganized as and when necessary.
- 3) At a time one entry could be referred in a card catalogue, where as this catalogue presents an entire page displaying a number of entries.
- 4) The computer produced book catalogue representing both the bibliographic information of a catalogue and organisation.

Disadvantages

Problems may arise in displaying current additions and changes in the cataloguing database.

6.4.7 Microform Catalogue

In microform catalogue, entries were greatly reduced and printed upon a film or fiche.

The microform cannot be read by naked eyes. A suitable microform reader, magnifies the reduced images on the film or fiche and projects them on to a screen is necessary consulting a microform catalogue.

As mentioned earlier, microform catalogue may either be in the form of a microfilm or in the form of microfiche. Microfilm can be on a single reel, but generally it is housed in a cassette containing two reel so that the film can be wound forwards or backwards within the container at the time of consultation. Microfilm readers usually allow the rotation of images through 90 degree.

On the other hand, microfiche is a transparent card type format. A reduction of nearly 42×42 indicates that the width and height of the microimage is $1/40$ of that of the original. Microimage area is correspondingly $1/1600$ of that of the original would give 200 frames per card. Microfiche has the advantage of direct access to a particular frame whereas microfilm requires a serial number through the film to locate a required entry, and serial search is a time consuming process compared to the direct access method afforded by microfiche.

Microform catalogues became popular with the development of Computer-output microform/COM. The COM method converts the digital information contained on the computer generated magnetic tape into print displayed on microform.

Microform catalogues are the output forms computerised cataloguing system. These forms were used extensively in the production of library catalogue during 1970s.

Advantages

Some of the advantages of microform catalogue are:

- i) Microform catalogues are compact and occupy less space in libraries. The space requirements of microform catalogues arise mainly because of space for microfilm or microfiche readers.
- ii) At a time several records can be viewed.

- iii) They are portable and accessible to users depending upon the number of copies of catalogues and machines available. Multiple copies of these catalogues can be prepared easily and inexpensively.
- iv) These catalogues are very easy to use and maintain. COM catalogues are much more cheaper than printed book catalogue produced by computer.

Disadvantages:

- 1) It is not easily updated and rearrangement of information is difficult on live catalogue.
- 2) Unless the file is updated, the deleted material still remains.
- 3) Psychologically the users do not feel comfortable in operating the equipments.
- 4) Cannot be used without microform reader.
- 5) They also required special care and protection
- 6) Medium and small libraries may not be benefited by this catalogue as microform readers/ printers are costly.

6.4.8 MARC and Online Catalogue

There has been a sea change in cataloguing practice with the increasing use of computers, information communication technology and network communications. Cataloguing standards have been rationalised to suit the changing cataloging practice, which have been universally accepted and adopted.

In a machine-readable catalogue, entries are rendered in a format which permits input and storage on magnetic tape or magnetic disc for manipulation in a computer. MARC format, UNIMARC, Common Communication Format (CCF) are standard formats. There are communication formats that are different from physical formats. Access to the catalogue entries may be 'off-line' or 'on-line'. 'Off-line' means that the computer can be used only at certain times. At the available computer time search must be made for a collection or batch of enquires. On-line systems, however, are linked directly to the computers which can be used immediately or at any time for processing enquiries and searching.

There are three major computer produced physical forms of library catalogues which are relevant to off-line access. These are:

- Printed form: Entries are printed in a conventional book format and are available in multiple copies.
- Card form: Each entry is transferred to one or more cards of standard catalogue card and are filed just as in a conventional card catalogue.
- Microform entries are transferred to microfiche and are used with appropriate microform readers.

In these forms, they are no more than the conventional catalogue forms. The only difference being their mode of production.

In an on-line catalogue, the entries are held in computer files and can be projected on the screen or printouts obtained. It is an organised accumulation of machine-readable accumulation of bibliographic records which are maintained on computer storage media facilitating for easy retrieval by library users and staff. It also helps keyword searching of title names and series names. The online catalogues are designed to access the

information online about the library materials by the users with varying background, age, subject interests and computer literacy etc.

Library of Congress defined online catalogue as, “An online catalogue is an access tool and resource guide to the collections of a library or libraries, which contains interrelated sets of bibliographic data in machine-readable form and which can be searched interactively on a terminal by users.”

The computer configuration needed for this catalogue is:

- A computer with keyboard and display units.
- Secondary storage facility
- Terminals wherever necessary.

Focus on the User

Online catalogues can be looked at from several perspectives. Many issues pertain to their design and using libraries, ranging from the number of terminals required to serve a given number of users, to the ergonomics of terminals placement, to the types and amount of information to be included in a catalogue, as well as its arrangement on a screen display. But in examining any form of library catalogue, online or other, the distinction between its implication for the internal operations of the library and its implications for library users must be kept in mind. Even though two perspectives do act on one another in the creation and use of the final product, the distinction is important. The internal-operations perspective has to do primarily with the production and maintenance of a catalogue; the library- user perspective has to do with the presentation and use of it.

An online catalogue has the following characteristics:

- It is meant to be used by end-users with or without training in online searching.
- The database records are usually in the MARC format or derived from MARC format.
- The records are brief bibliographic descriptions enriched by a small number of controlled subject descriptor from Sears list or LC Subject Headings and classification number either from DDC or LC.

The online catalogues consist of information about the books like author (s), title pagination/volumes, publisher, year of publication, series, ISBN, subject descriptors and class number etc. Where as in case of periodicals this catalogue generally describes periodical as a whole. The contents of a periodical and the description of the article are recorded in the full-text databases.

Online catalogues are basically menu-driven and designed with little search options to help the novice searches. Some online catalogue, however operate with command language mode for more exhaustive searching. It can be done by specific item searching and subject searching.

The MARC record format was designed by the Library of Congress and the British Library also adopted it. The aim was to construct bibliographic records in machine-readable form and to facilitate reformatting for a wide variety of purpose, one of which was production of a record for the creation of library catalogues. This national effort made it possible to download from the database on magnetic tapes supplied by the

Library Congress or the British Library, to obtain the records for the stock of a specific library. Thus, a number of computers readable catalogues proliferated in USA, UK and other European countries.

Advantages

The machine-readable catalogue performs, all the functions of a library catalogue with greater efficiency and speed than any other form. We shall spell out these advantages:

A computer readable catalogue:

- can be kept updated with speed and efficiency;
- can search for any bibliographical element, such as author, subject, publisher, price;
- is user friendly and new access points and search capabilities can be added as and when necessary;
- can easily be multiplied;
- union catalogue amongst several libraries by electronic communication is possible;
- easy to construct provided the cataloguer has expertise in the technique and the user feels very easy and has instant access to the pool of information and is well versed with necessary instruction;
- facilitates extensive search facility and possesses all the best qualities of both DDC and CC;
- interchange of catalogue records has led to greater consistency, uniformity and standardisation in catalogue records; and
- identifies the availability of the required item on the shelf or on loan if the computer system is linked to a computerised system for issue and return of the reading materials.

Using a computer, one can store and sort catalogue entries automatically. The resultant computer output can be utilised. For example, the computer 'printout' itself can be used as 'master' and reproduced by offset printing process to obtain any number of copies. Alternatively, the output on magnetic tape may be used as the catalogue to access entries directly and one can search and know from it the availability of any document in a library.

Disadvantages

- 1) Users should be trained to the computerised systems to exploit fully the capability of a machine-readable catalogue.
- 2) Both the users and library need to be trained to use the online catalogue
- 3) Interruption in power supply, breakdown of computer system, lack of proper knowledge of the users to operate the system poses problems for its best use.

As a result of rapid development in computer and communication technologies, a number of libraries in the world are switching over to computer readable catalogues and in the process, several on-line catalogue networks have developed and are available for public access in libraries.

Self Check Exercise

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

4) Discuss the advantages of microform catalogue.

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5) Discuss the advantages of computerised catalogue.

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6.4.9 CD-ROM Catalogue

It is a MARC-based compilation of bibliographic records distributed on CD-ROMs supported with software. CD-ROMs are optical discs and with the help of laser beams it can be written and recorded. It is an offline format like the microform that provides excellent search facilities. The introduction of offline, computer produced book and Computer Output Microform (COM) catalogue was a milestone in the history of library catalogue, in terms of production and maintenance. It reveals many of the problems in card catalogue production and effective maintenance. Besides, many cumbersome tasks that are fundamental to card catalogue were eliminated with the use of computers and machine-readable records.

Advantages

- a) It is used because of its fine quality of portability and transportability.
- b) It provides the best possible combination of large data-storage capacity, less production and high speed computer based search.
- c) Union Catalogues can be prepared for sale purpose with the production of CD-ROMS

Disadvantages

- 1) Since it is an offline medium, it faces all the problems of conventional forms of offline catalogues.
- 2) In comparison with online retrieval, CD-ROM is slow.

6.4.10 Comparative Study of Physical form of Catalogues

Forms of catalogue	Easy to use	Easy to scan multiple copies	Easy to keep up-to-date	Easy to produce	Bulky	Easy to guide	Other factors
Printed	Yes	No	Yes	Yes	No	Yes	
Guard book	Yes	Yes, with some effort	Yes	Feasible but important	Yes	Yes	Time consuming to compile. Withdrawals are a problem
Card	Database	Yes	No	No	Yes	Fairly easy	One user can monopolise a complete section.
Sheaf	Yes	Yes	No, unless multiple entries to page which makes updating difficult.	Not usual but it is possible.	Yes	No	Binding mechanism can be awkward. Sheaf slips are filmy.
Micro form	Database	Yes	Yes	Yes	No	Yes	Requires a machine to read.
Machine readable	Yes, but some training may be necessary.	Yes	No, but other search facilities compensate.	A number of access terminals may be provided.	A terminal as small as a portable typewriter.	Not applicable.	Power and equipment failure are problems to access

Self Check Exercise

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

5) List the best features of the physically forms of library catalogue.

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6.5 SUMMARY

In this Unit, the different types of physical forms of library catalogues have been enumerated and described. These include conventional forms like Bound register. Printed book form, Sheaf or loose leaf form and Card form, modern forms like Microform and Machine-Readable forms. The advantage and limitations associated with each of these different forms are explained.

With the advent of computers, the entire cataloguing process as well as the physical production of catalogues has undergone many changes, making library catalogue a

versatile tool in a library. Modern machine-readable catalogues perform the functions of a library catalogue with more efficiency and speed. Whatever physical form a library catalogue may take, it should have the following essential features: ease of use, updating capability, browsing facility, easy production of multiple copies and occupies less space. A comparative statement of the different features of the physical forms of library catalogue is also given.

6.6 ANSWERS TO SELF CHECK EXERCISES

1) The physical forms of library catalogue are:

Bound register or ledger form

Printed book form

Sheaf or loose-leaf form

Card form

Microform and

CD-ROM catalogue

2) The two reasons why a card catalogue is more popular than a printed book form are:

i) The card catalogue can always be kept updated which is the most essential requirement of a catalogue.

ii) Addition or withdrawal of entries to the catalogue does not disturb or dislocate the existing arrangement of entries.

3) The advantages of a microform catalogue are:

Microform catalogues are compact and occupy less space in libraries. They are portable and immediate access to the catalogue is possible. Multiple copies of this catalogue can be prepared easily and inexpensively. These catalogues are very easy to use and maintain.

4) The advantage of computerised catalogue are as follows :

Using a computer, the entries can be stored and sorted out automatically, but also the resultant computer output can be utilised in a number of ways. For instance, the computer printout itself can be used as a master copy that can be reproduced by offset printing process. Alternatively the output on magnetic tape may be processed into a microform. Eventually, the computer itself can be used as a master copy that can be reproduced by offset printing process. Alternatively the output on magnetic tape may be processed into a microform. Eventually, the computer itself may be used as the catalogue to access the entries directly.

It can search any document in a library.

5) The best features of the physical form of library catalogue are:

i) Ease of use, ii) Easy to update, iii) Permit browsing, iv) Easy production of multiple copies, v) Occupy very little space, and vi) Serve as a good guide providing multiple access points.

6.7 KEYWORDS

- Bibliographic Record Format** : The layout of presentation of bibliographical data of a document in a machine-readable form or in machine printout.
- Cooperative Cataloguing** : The sharing by a number of libraries the cost and labour of cataloguing to avoid the duplication of effort common to each.
- Centralised Cataloguing** : The cataloguing of documents by a central agency or library and the distribution there form of printed entries on catalogue card, or in machine-readable form, e.g. Library of Congress printed card service.
- Database** : Information stored on computer files and accessible via a remote terminals and telecommunication link.
- Downloading** : To capture data online from a remote host computer and transfer it to the store of an in house stand-alone system, e.g. a microcomputer, for processing.
- Master** : The plate or then stencil for duplication or for off-set printing, from which a multiple copies are made.
- Microform** : A generic term indicating any form of document in a reduced form whether on flat or on roll film or on microfiche.

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