2

INTRODUCTION TO LIBRARY CLASSIFICATION

INTRODUCTION

In the previous lesson you have studied different types of material in the library. All the material of a library is for use. But there is no fixed sequence of use of this material. Any book or other material can be demanded by any user at anytime. Therefore libraries need a system of arrangement of collection so that it can be located and used whenever needed. Libraries have evolved system of classification for arrangement of books and other materials.

In this lesson learner will learn about library classification and different schemes used for classification purposes in the libraries.
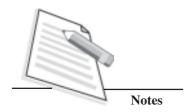
OBJECTIVES

After completing this lesson, learner will be able to:

● discuss classification, and its need and purpose in libraries;

● describe notation, class number, book number and collection number;

● list different library classification schemes; and

● describe the main classes of Dewey Decimal Classification and Colon Classification.

2.1 INTRODUCTION TO LIBRARY CLASSIFICATION

Classification is a process used by all human beings. We may or may not be aware of classification or its principles but we use it in our daily life. You may remember

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when you visit a grocery shop; the shopkeeper produces you required item within no time. Although, he may have hundreds of items kept in the small space he is able to produce your required item instantly. This is because, he has arranged all items in a classified sequence. Let us take another example, we have thousands of items at our home, but we keep them in such a way that all these items are found within no time. All our clothes are kept at one place, kitchen utensils and foodstuffs in the kitchen, and all reading material together at different place, and so on. Such examples are found everywhere in life whether we are aware of it or not. In general we keep all the things similar in nature, purpose, use, etc. together and those things which are different from them at different place. Because of this, we have kept utensils and foodstuffs in the kitchen and soap, toothbrush and toothpaste in the bathroom.

Thus, in our everyday life we use classification mostly unknowingly by putting like things together and unlike things separately, which makes our life easy.

2.2 NEED FOR CLASSIFICATION IN LIBRARIES

Like our everyday life, library has thousands or even lakhs of documents, which include not only books, but journals, magazines, pamphlets, maps ,CDs and many other documents. If we take an example of only books ,everyone has seen at least thousands of books in every library. If we do not keep these books in systematic order, how can we find the user's required book, when he/she needs it? It is very difficult, if not impossible, to find one book, in a heap of thousands it is very difficult, if not impossible, i.e it will take a lot of time to search.

2.3   METHODS OF ARRANGEMENT OF BOOKS IN LIBRARIES

Different libraries started arranging books in different ways according to their local requirements. Some kept books of same colour together, but it hardly helped while searching the required book. Size of the book also did not help much. Although, very small and very large size books are still kept separately even in modern libraries. But, this is done purely for administrative reasons as a very small size (called undersized) book will not be visible in the shelf with normal size books and also it is very difficult to detect if someone attempts to steal it. The very large size (called oversized) book cannot be kept at the shelf because shelf size is not very large, so such books need special provisions. Some libraries started arranging books in the order of their arrival in the library because, all libraries maintain an accession register and every book received in the library is entered in it. So every book in a library has a unique accession number. But although, accession number can arrange all books of a library in one order, but it is not helpful at the time of searching of the books. Because, users generally do not demand a book in the order in which it was received in the library. However, some users ask for latest books and therefore, libraries keep the latest received books (called new arrivals) on display for some time at a place where every user entering the library can see them. When new set of books are received in the library, they replace the earlier books on display. These in turn are merged with the library collection. The arrangement by author or title

was also not very helpful, as only few users remember the name of author or title of the book. Similarly, some libraries used fixed location and mentioned the same in the catalogue ,but arranging new books in this method was very difficult.

The experience of libraries all over the world has shown that most of the users demand books by subject. Some ask by very general subject like history ,political science, physics, chemistry, psychology, sociology and so on; while others demand information on specific topics, like date of birth of Swamy Vivekanand, how television works, name of the president of Sri Lanka, water pollution, alcoholism, railway accidents, HIV/AIDS, and so on. Some of these subjects are known to all, as these are taught in schools and colleges, but, others are covered as small topics in books. The subjects of different books also have wide variations. Some subjects are broader than others while some are related in some way. Different subjects are related with each other in different ways. This relationship needs to be represented in a systematic manner so that books of all subjects can be arranged systematically. This problem is studied in library classification and solutions are presented in the form of classification schemes. After learning various methods of arrangement of books in libraries let us understand the need and purpose of library classification schemes .After learning various methods of arrangement of books in libraries let us understand the need and purpose of library classification.

INTEXT QUESTION 2.1

State True/False

1. Arranging the library material by accession number in one order is not helpful in searching of a book.

2. The experience of libraries all over the world has shown that most of the users demand books by subject.
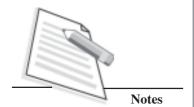
2.4 LIBRARY CLASSIFICATION

Every library has thousands of books that need to be arranged according to subjects; but, subjects of different books are different, so a need was felt to have a scheme which can arrange all the subjects according to their likeness .The similar subjects can be placed nearer and subjects only marginally related can be kept thereafter and such subjects which are not at all related can be kept at different location. Such a scheme, which arranges subjects of books on the basis of their likeness, is called a library classification scheme. The library classification schemes help in classifying a book, or in other words ,help in identifying the exact position of a subject among thousands of subjects.

2.5 PURPOSE OF LIBRARY CLASSIFICATION

As you know, libraries were facing problems due to large number of books and started arranging those books in some order. After trying a number of arrangements

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like colour, size, accession number, finally it was found that users mostly ask for books by subject. Thus, some classification schemes came into existence. So, the main purpose of library classification is to arrange the books on shelves in a systematic order, so that whenever a book is needed it can be located immediately. In general, the library classification has following purposes:

1) Arrange all the books and other documents of a library in a systematic order so that library collection looks organised;

2) Bring together all books of same subject so that a user does not have to go to different places for books of his subject;

3) Keep books of related subjects nearby;

4) Find a particular book of a subject on the shelf as call number (See. Sec 2.8) distinctly identifies a particular book in the library;

5) Find total books on a given subject in the library as all the books of a subject have same class number, and therefore, are kept together;

6) Replace the books at their proper place on the shelf after use;

7) Allocate proper place to new books in relation to other books of the library, as acquisition of new books is a regular work in all libraries and these books are to be merged with existing library collection;

8) Assist the cataloguer in finding subject headings for library catalogue particularly when classified catalogue is used and subject entries are to be prepared ; and

9) Help in compilation of subject bibliographies.

There may be some other purposes for which library classification can be used. One can use library classification for arrangement of museum objects or Internet resources. It can also be used for maintenance of circulation statistics of the library and organization of reference queries.

INTEXT QUESTION 2.2

Fill in blanks

1. The main purpose of library classification is to _____ the books in a _____

2. The library classification schemes help in ——————————— a book, or in other words, help in identifying the exact position of a ——————————among thousands of subjects.

2.6 NOTATION

Every classification scheme arranges different subjects in order of their likeness

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and then assigns an artificial number or letter to represent that subject. The different artificial numbers or letters used to represent subjects in a classification scheme are collectively known as notation. Different classification schemes use different notation. Dewey Decimal classification (DDC) uses only Indo-Arabic numerals (0 to9) for representing different subjects while Colon Classification (CC) 7th edition uses74 different symbols (26 Roman Capital letters; 23 Roman small letters excluding i, l, and o; 1 Greek letter Ä; 10 Indo-Arabic numerals; and 14 other signs used for connecting these symbols) as notation. The total number of symbols used as notation by a classification scheme is called its notational base. Some of the subjects and notations used for their representation in DDC and CC are shown below:

Table-1: Notation used in DDC and CC

Subject	Notation	
	DDC	CC
Library Science	020	2
Mathematics	510	B
Physics	530	**C**
Chemistry	540	**E**
Social Sciences	300	Ó

The above Table-1 shows that all the symbols used in DDC for different subjects are only numerals while in CC these symbols include numerals ,Roman capital letters and Greek letters. A specific symbol used for a particular class in a scheme like '2 for Library Science' in CC is called its class number. The concept of class number is explained below.

2.7 CALL NUMBER

Call number is the number that distinctly identifies a book in a library. As you know our parents have given a particular name to us, and we are known by that name. Whenever someone wants to talk to us that name is used to call our attention. So in social context, our name is our call number.

There are thousands or even more books in a library. Call number is used to identify one particular book in that collection. It also helps in finding the relative location of that book in the whole collection. Thus, if you know the general sequence of arrangement of books in a library, the call number of a book will guide you to the area and to the exact place where the book is kept.
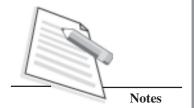
The call number has three parts: class number, book number and collection number.

INTEXT QUESTION 2.3

Select the correct answer.

1. (a) Call number is a combination of class number and book number.

(b) Call number is combination of class number, Book number, and collection number.

(c) Call number is a combination of class number and collection number.

2.7.1 Class number

Class number of a book represents its subject. As you know, classification scheme organizes all the subjects in a systematic order and uses an artificial scheme of numbers, alphabets and symbols called notation, for each subject.

The notation used for a particular subject in a classification scheme is called its class number. In the example at Table-1, the class number of Library Science is 2 and the class number of Mathematics is B. All the classification schemes use notation to represent different subjects; but, they use different class numbers for different subjects.

Thus, the class number of Library Science in CC is 2 whereas in DDC it is020. Similarly, the class number of Mathematics in CC and DDC is B and510 respectively.

When we classify a book, that is, assign a particular class number to a book, we translate its specific subject in the notation of that scheme. If a book is on Chemistry, we will look into the classification scheme, find Chemistry and the notation used for chemistry there, and then mark that number as class number in the book. For example, if your library is using DDC scheme for classification, you will see that 540 is used for Chemistry in that scheme, so you will assign class number 540 to that book.

Thus, we can say that every book has some subject and the notation used forthat subject in a particular classification scheme is the class number of that book.

At the time of classifying a document, class number is written in pencil at theupper half portion of verso (back) of the title page.

2.7.2 Book number

In the previous section you have understood class number which is assigned to different books on the basis of their subject. Books of different subjects will have different class numbers. But in a library there may be many books on one subject and all these books will have the same class number. Like in a school or college library if two textbooks of a subject are acquired in large number say 20 each; then all these 40 books will have the same class number. We need some method to distinguish all the books having same class number so that these books can be arranged in some order and finds its unique place on shelf.

We need some method to distinguish all the books having same class number so that these books can be arranged in some order. Books of the same class can be arranged according to book number. According to Dr. S R Ranganathan "the book number of a book is a symbol used to fix its position relatively to the other books having the same ultimate class". So, different books of same subject will have same class number but different book number.

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Methods of assigning book numbers

There are many methods of assigning book numbers. But the following methods are used by many libraries:

a)   Author surname three letter system

b)   Cutter-Sanborn three figure author table

c)   Biscoe system of year of publication

d)   Colon book number system

Author's surname method: It is the most simple method of assigning booknumbers. In this method, we use first three digits of author's surname as book number. In case the author's surname is not letters given, the book number can be constructed from the forename. Eg.

Author's name	Book number
SR Ranganathan	RAN
MM Kashyap	KAS
Krishan Kumar	KRI

Sometimes, some standard author table may be used for author number like Cutter-Sanborn three figure author table. But generally some modification of three letter author number like addition of first letter of title of the book in the book number may also be used.

Colon Book Number System

Dr. SR Ranganathan has given an elaborate scheme of book number consisting of following fields:
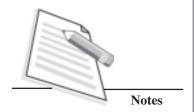
Formula of book number: [L][F][Y][A].[V]-[S];[C]:[Cr] Where

L   =   Language of the book

F   =   Form in which the book is written e.g. index, list, picture, graph.

Y   =   Year of publication of the book

A   =   Accession part of the book number. It is given when more than one books of same subject published in the same year are acquired in the library

V   =   Volume number is given when a multivolume book is acquired in the library

S   =   Supplement number is given when a supplement is published for a volume

C   =   Copy number particularly useful for school and college libraries where multiple copies of textbooks are acquired

Cr   =   Criticism number is used when a book based on some other book is acquired in the library.

It is not always necessary to use all these fields. Language number is not used for the books which are published in the language in which most of the library books are published. Generally year of publication is sufficient. But this scheme ensures that every book of same class in a library has a different book number. Thus, a book published in 2010 in the form of Parody in Bengali language will have the book number 157jP10

The book number is generally written below the class number on the spine of the book or on the back of the title page. However, in the main entry of classified catalogue it is written after the class number leaving two character spaces. On the back of title page class number and book number may be written as following:

330	954	510
SHA	RAN	SEN

INTEXT QUESTION 2.4

Select the correct option

1. Book number of book on library science published in 1990 by Girija Kumar would be as per Author' surname method.

    (a) KUM (b) GIR (c) GIR 1990

2. Which of the following is not a part of Book No.?

    (a) Year of Publication (b) Author's Name (c) Class No

2.7.3 Collection number

Libraries generally do not have a single sequence of books. Reference books are separated from other books in most of the libraries. In school and college libraries text books are kept separately. In university libraries there may be separate departmental libraries besides separate reference collection. These departmental libraries are located in the department and not in the main library.

Some books are very small to be kept on the shelves some other books are too large in size to be kept with other books. The above mentioned situations lead to more than one sequence of books(called collection) in the library. Thus, a book may be in any of the collections in the library and it is necessary to mention the collection where that book is.

The indication of the collection is made by some symbols called collection number. Although, a library may devise its own collection number scheme which may help in indicating the collection, Dr. Ranganathan's scheme as given below may be adopted.

Collection	Collection number
Undersized	Underline Book Number
Oversized	Overline Book Number
Abnormal	Underline and Overline Book Number
Wornout	Encircle Book Number
Reading Room	RR
Periodicals	PC
Physics Department	CD
Library Science Department	2D

Except where collection number is to be marked on book number, it is to be written above the class number.
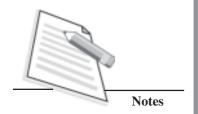
2.8 SCHEMES OF LIBRARY CLASSIFICATION

In order to provide service to users, libraries of nineteenth century, started arranging their books according to subjects. But as the collection grew, it became difficult to arrange it with the help of simple ordering of subjects. They needed an elaborate scheme of classification. Many librarians designed such schemes specially suited to their libraries. The first scheme, that can be used by any library was designed by Melvil Dewey in 1876, which is now known as Dewey Decimal Classification (DDC). The latest, 23rd edition of DDC, has been published in 2011. Another major classification scheme Universal Decimal Classification (UDC), which was based on DDC, is very popular in Europe and in special libraries. The father of library science in India, Dr. S.R. Ranganathan, designed Colon Classification in 1933. This scheme is still very popular in Indian libraries. Now we will briefly study some important library classification schemes.

2.8.1 Dewey Decimal Classification

As stated earlier, DDC is the first general library classification scheme. It was designed by Melvil Dewey in 1876. The first edition of DDC had only44 pages including a 12 page schedule or scheme of subjects. Dewey used Indo-Arabic numerals (i.e. numbers from 0 to 9) as notation for the scheme .It is the most popular scheme in the world. Since its first edition which was published in 1876, DDC has been regularly revised to keep it up to date. The23rd edition of DDC has been published in May 2011. Its electronic version WebDewey 2.0 has also been released simultaneously.

Every class number in DDC consists of three digits (numbers). For an aid to Eye after third digit, a dot is inserted and then fourth, fifth and more digits are written. In the beginning of schedule three summaries of class numbers are given. First summary gives 10 main classes, second summary gives 100 divisions where each main class is divided into 10 branches and third summary gives 1000sections where each division is further divided into 10 branches. The first summary of DDC 22nd edition is reproduced here below:

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000	Computer science, Information & general works
100	Philosophy & psychology
200	Religion
300	Social sciences
400	Language
500	Science
600	Technology
700	Arts & recreation
800	Literature
900	History & geography

In the second summary each main class is further divided into 10 branches called divisions. The 10 divisions of main class 000 are given below:

000	Computer science, Knowledge & Systems
010	Bibliographies
020	Library & Information Sciences
030	Encyclopedias & books of facts
040	[Unassigned]
050	Magazines, journals & serials
060	Associations, organizations & museums
070	News media, journalism & publishing
080	Quotations
090	Manuscripts & rare books

In the third summary each division is further divided into 10 sections. The sections of 020 Library & Information Sciences are given below:

020	Library & Information Sciences
021	Library relationships
022	Administration of physical plant
023	Personnel management
024	[Unassigned]
025	Library operations
026	Libraries for specific subjects

027   General libraries

028   Reading and use of other information media

029   [Unassigned]

Further branches of each section are given in the schedules. In addition to numbers given in the schedules, six tables can also be used for number building. These tables are given below:

Table-1: Standard Subdivisions

Table-2: Geographic Areas, Historical Periods, Persons

Table-3: Subdivisions for the Arts, for Individual Literatures, for Specific Literary Forms

Table-3 A: Subdivisions for Works by or about Individual Authors

Table-3 B: Subdivisions for Works by or about More than One Author

Table-3 C: Notation to be Added Where Instructed in Table3B, 700.4,791.4, 808-809

Table-4: Subdivisions of Individual Languages and Language Families

Table-5: Ethnic and National Groups

Table-6: Languages

DDC 21st Edition also had a Table-7 Group of Persons which has been removed in DDC 22nd Edition.
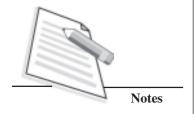
2.8.2 Colon Classification

CC was designed by the father of library science in India, Dr. SR Ranganathan, in 1933. Dr. Ranganathan was a teacher of Mathematics before coming to Library Science. After joining Library Science he got so much interested in it that he started thinking towards a new classification scheme. He was very disappointed with the classification schemes available at that time and soon he designed a different type of classification scheme known as Colon Classification. CC is a faceted scheme, that is, it does not have schedules of classes or subjects as in other schemes, but each Main Class has one or more schedules of facets that can be added to the Main Class number. The universe of the knowledge is divided into some subjects which are known as Main Classes.

During the life time of Dr. Ranganathan, six editions of CC were published, but after his death his work could not get the attention it deserved. The seventh edition of CC was published in 1987 without index, so it could not be used by libraries. The libraries which are still using CC are either using its sixth edition or incorporating the revisions, which were brought out in 1963.

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The scheme of Main Classes given in CC 6th revised edition is reproduced here:

z	Generalia	LX	Pharmacognosy
1	Universe of Knowledge	M	Useful Arts
2	Library Science	Ä	Spiritual Experience and Mysticism
3	Book Science	MZ	Humanities and Social Sciences
4	Journalism	MZA	Humanities
A	Natural Sciences	N	Fine Arts
AZ	Mathematical Sciences	NX	Literature and Language
B	Mathematics	O	Literature
BZ	Physical Sciences	P	Linguistics
C	Physics	Q	Religion
D	Engineering	R	Philosophy
E	Chemistry	S	Psychology
F	Technology	Ó	Social Sciences
G	Biology	T	Education
H	Geology	U	Geography
HX	Mining	V	History
I	Botany	W	Political Science
J	Agriculture	X	Economics
K	Zoology	Y	Sociology
KX	Animal Husbandry	YX	Social Work
L	Medicine	Z	Law

2.8.3 Other Classification Schemes

2.8.3.1 Library of Congress Classification (1901)

The Library of Congress (LC) Classification scheme, as its name shows, was designed for the Library of Congress of USA. The scheme serves the requirements of the world's largest library LC and is updated regularly. Although, it is only a practical scheme without much theoretical base, but is quite popular particularly in libraries of USA because of easy availability of class numbers for most of the books. There is some influence of Cutter's Expansive Classification on main outline of classes of LC Classification.

2.8.3.2 Universal Decimal Classification (UDC) (1905)

UDC is the only classification scheme which was not designed for classification of books. It was designed for arranging the entries of universal bibliography at International Institute of Bibliography (Brussels). Two Belgians Paul Otlet and Henri La Fontaine revised the DDC (5th edition) to such an extent that this new scheme

UDC was born. So UDC has a base of DDC or we can say that broadly the main classes and their divisions are similar in both the schemes. But, UDC has many more features for building a class number than DDC. Due to these features it is quite popular among special libraries all over the world.

There are some other classification schemes which are now mainly of historical importance. CA Cutter designed Expansive Classification (1891)in seven separate classifications of increasing details. First very broad, second more detailed and so on. James Duff Brown's Subject Classification (1906)was different in the way that it brought together all the material related to a particular topic, instead of using discipline oriented approach used by other schemes. Henry Evelyn Bliss's Bibliographic Classification (1935) is theoretically significant because it attempted to find an order of main classes that was based on scientific, and educational consensus. International Federation for Documentation (FID) published Broad System of Ordering(BSO) in 1978 for dealing with blocks of information. It was not meant forbook classification.

Notes

Activities 2.1

1. Pick up any 5 books from your library classify them using CC and DDC.

2. Take out 5 books from same class numbers and from different collection and note down book number by publication year and Author surname methods.

INTEXT QUESTION 2.5

State True/ False

1. Dewey Decimal Classification number uses notation comprising Indo Arabic numerals only.

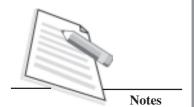2. Colon classification does not have schedules of classes or subject.

WHAT YOU HAVE LEARNT

1. Libraries have thousands of books which need to be arranged in some order, because whenever a user demands a book, it should be located instantly.

2. Classification is a natural process. We classify, knowingly or unknowingly, whenever we have many items. This is a general necessity to bring order into things.

3. Initially different libraries attempted different techniques for arranging books.They used colour, size, author, title, accession number and subject; and finally reached the conclusion that as most of the time users demand books by subject ,the library collection should be arranged by subject.

4. But subject arrangement is not very easy to follow. Subjects have different scope and relations: one subject is a branch of the other subject or a totally new subject comes into existence which does not have any place among traditional subjects.

5. Every one of us cannot decide where to put a new subject; so different classification schemes were designed by experts that looked into all these problems.

6. DDC was the first such scheme and it is still the most popular one, among different classification schemes.

7. UDC which was initially based on DDC has many additional features that make it the choice of special libraries.

8. During last more than a century a number of other schemes were designed by experts, but except some special schemes designed for particular libraries, most of these are mainly of historical importance.

TERMINAL EXERCISE

1. What is the need for library classification? Also describe its purposes.

2. What is the role of call number? Describe its parts and their functions.

3. What is notation? Describe the notation used in CC.

4. Compare the main classes of DDC and CC.

ANSWERS TO INTEXT QUESTIONS

2.1

1. True

2. True

2.2

1. Arrange, Systematic order

2. Classifying, Subject

2.3

1. (b)

2.4

1. (b)

2. (c)

| 2.5 |

1. (a) True

   (b) True

TERMS

The terms covered in this lesson which require further explanation are typed below in an alphabetic order. The learners are required to explain each term.

Book Number:

Call Number:

Class Number:

Classification Scheme:

Collection Number:

Notation: