# INFORMATION RETRIEVAL TOOLS: CATALOGUES, INDEXES, SUBJECT HEADING LISTS

L. No.	Title of the	Skills	Activity
	Lesson		
16B	Information	Information literacy,	Searching retrieval tools,
	Retrieval Tools:	Effective Communication,	Evaluating and making
	Catalogues, Indexes,	ICT skills, Problem Solving	available
	Subject Heading	and Decision Making	Information/information
	Lists		sources

### Summary

The extensive growth of information has led to large amounts of useful information unavailable or not being located when required. The need for location of relevant information and differentiating it from non-relevant information has made it essential for the information organisations to acquire or devise information retrieval tools.

Information retrieval tools aid the library users to locate, retrieve and use the desired information available in various formats. Traditionally, the various information retrieval tools are bibliographies, classification schemes, indexes and abstracts, library catalogues, Online Public Access Catalogues (OPACs), Subject heading lists and Thesaurus.

Presently, computerized databases and their indexes are also important in the organization of knowledge. These are gradually replacing the traditional tools in a number of applications. At this point, the traditional tools and the computer based tools provide a unified approach to the organization of knowledge which are discussed in this lesson.

The present day libraries and information organisations are forced to make maximum use of the information retrieval tools to facilitate the information storage and retrieval process.

In this lesson, you will be introduced to information retrieval tools, viz. catalogues, indexes, subject heading lists and thesauri with examples.

# **Principal Points**

- Information retrieval tools are basic building blocks for a system that will organize recorded information that is collected by libraries, archives, museums, etc.
- The basic information retrieval tools include: bibliographies, catalogues, indexes, finding aids, registers, online databases, etc.
- Library catalogue is a list of books and other reading materials available in a particular library.
- The types of catalogues commonly found in libraries are: author, title, author/title, and subject catalogues.
- There are two types of catalogues, namely, classified catalogue and dictionary catalogue.
- An index is a filter or pointer, or indicator, or more fully, a systematic guide to the items contained in, or concepts derived from a collection.
- Subject indexing is a classification process.
- Subject headings lists are useful to understand the relationship among concepts to a certain degree, besides their application in indexing. Subject headings are provided in the catalogue entries to provide subject access to information.
- > Indexing language is defined as a list of terms or notations that might be used as access points in an index. An indexing language may also be referred to as a retrieval language.
- ➤ Indexing languages may be of three distinct types: (i) Controlled indexing language, (ii) Natural indexing language, and (iii) Free indexing language.
- > Controlled indexing languages are indexing languages in which both the terms that are used to represent subjects, and the process whereby terms are assigned to a particular document, are controlled by an indexer.
- There are two types of controlled indexing languages: alphabetical indexing languages and classification schemes. Classification is also prominent in the physical arrangement of documents.
- ➤ The Library of Congress Subject Headings (LCSH) comprises a thesaurus of subject headings, maintained by the United States Library of Congress for use in bibliographic records.
- The Sears List of Subject Headings is a thesaurus-like database delivering a core list of headings.
- > Thesaurus means an authoritative list showing terms which may and sometimes may not be used in a catalogue or index to describe concepts. In a thesaurus, each term is usually given together with terms; which are related to it in a number of ways.
- Different types of indexes are book index, author index, title index and subject index.



### **Build your Understanding**

- 1. Information retrieval is concerned with the process of selecting information from storage devices. The basic knowledge understanding of retrieval tools is therefore must for facilitating access to information.
- 2. Precision and Recall information retrieval, Recall is the number of documents retrieved by a search divided by the total number of existing documents. On the other hand, Precision is the number of relevant documents retrieved by a search divided by the number documents total of retrieved by that search.

#### What's



- 1. Today's information professionals should be conversant with traditional information tools and methods. This is the fact due to that recent developments in information retrieval in web and digital library environment have their roots in these traditional methods and tools.
- 2. The purpose of using a subject heading in a library's cataloguing record is to give the person searching for items in the library a way to find information by the topics that are covered in those items.
- 3. In information retrieval, a thesaurus can be used as a form of controlled vocabulary to aid in the indexing of appropriate subject terms and depict subject relationships.



- 1. The term 'Information Retrieval' was coined by Kelvin Mooers in 1950.
- 2. 'Library of Congress Subject Headings' maintained by the Library of Congress was first published in 1898, a year after the publication of 'Library of Congress Classification in 1897.
- 3. 'Sears List of Subject Headings' was formulated by Minnie Earl Sears in 1923. This was to make it easier for libraries to find the subject heading they can use to further classify their collection.
- 4. MeSH (Medical Subject Headings), a thesaurus is a controlled and hierarchically organised vocabulary produced by the National Library of Medicine, USA.
- 5. Every Internet search engine is based on information retrieval. Google, Bing and Yahoo are examples of prominent computer-aided information retrieval search engines.

## **Extend your Horizon**

- 1. Visit a university library and prominent locate any indexing/abstracting service subscribed by the library. Try to locate Book Index, Author Index, Title Index and Subject Index.
- 2. In any library, look for the available list of subject headings used by the library staff. For the term 'Physical Chemistry', find out the Broader Term (BT), Related Term (RT) and Narrower Term (NT).

#### **Evaluate Yourself**

- 1. Which are the different types of catalogues commonly found libraries?
- 2. List the various types of Controlled Indexing Languages.
- 3. Differentiate between an author index and a subject index.
- 4. Explain, with example, the term relationships in Library of Congress List of Subject Headings.