



# TYPES OF INFORMATION SOURCES

## 6.1 INTRODUCTION

In Lesson 5 you have learnt about different types of information sources, their development and how they are organized based on their information contents and form.

In this lesson you will learn in detail about each one of these sources, their basic information content, utility and examples. You will also learn how to use them effectively to provide services to the users. The Lesson will also deal with advantages and limitations of information sources in print as well as in electronic form.



## 6.2 OBJECTIVES

After studying this lesson, you will be able to:-

- list various types of information sources;
- explain the difference between periodicals and serials; journals and magazines; and newspapers;
- discuss reports, standards and patents as sources of information;
- explain the role of secondary periodicals and bibliography in accessing primary sources of information;
- distinguish between a book and a manuscript;
- explain the difference between a pamphlet and a book;
- describe a typical book and its parts;

- categorize books on given parameters (content and volume); and
- discuss the importance of tertiary sources of information.

### 6.3 PRIMARY SOURCES OF INFORMATION

You already know that primary sources are those sources which contain original information. They include new raw data, new interpretation of previously known facts or idea, any new observation or experiment, etc. Primary sources are of varied types, large in number and are widely scattered. Primary sources include periodicals, newspapers, technical reports, dissertations, conference papers, patents, standards, trade and product bulletins.

#### 6.3.1 Periodicals

A periodical is defined as a publication which is published with definite periodicity e.g., weekly, fortnightly, monthly, or quarterly under the same title, and intended to be brought out indefinitely. Each issue is dated and consecutively numbered. All the issues in a volume have continuous pagination. A periodical consists of collection of articles contributed by different authors. Periodicals are also called journals.

A 'serial' can be defined as any publication issued in successive parts which is intended to be continued indefinitely. Common types of serials include research periodicals, trade and business periodicals, newsletters, newspapers, popular magazines, almanacs and yearbooks, annual reviews, indexing and abstracting periodicals. Multivolume books and encyclopaedias are not serials, as they cease publication once the last volume of the series is published.

The information in periodicals is timely, current and up-to-date than information in books. Periodicals are of many types such as scholarly periodicals, trade and business periodicals, popular periodicals and magazines. Scientific journals were the first ones to appear on the scene. In this lesson you will study about following periodicals:-

- Scholarly Periodicals;
- Trade and Business Periodicals;
- Popular Periodicals;
- Magazines; and
- E-Journals





## Notes

*(a) Scholarly Periodicals*

Scholarly periodicals are published by learned societies, R&D organizations, universities and some reputed commercial publishers. These are better known as journals which generally publish research findings and are peer reviewed. Because of the rigorous evaluation process, these publications are also referred to as refereed or peer-reviewed journals. Each article in such journals becomes a permanent record of that subject. Some of the basic features of such journals are given below.

- The purpose of a scholarly journal is to report original and significant research in a particular discipline. These journals are primary source of information and also called primary periodicals.
- These periodicals are the best source of information on new or current topics.
- Articles are written by researchers, professionals or experts in the field. The articles are mostly technical in nature and cannot be understood by readers who lack the subject background.
- These journals are meant for scholarly audience and are called scholarly journals.
- Normally, these journals do not carry any advertisements.
- Each issue is consecutively numbered and all issues in a volume have continuous pagination.
- A scholarly journal article often has an abstract (a descriptive summary of the article) before the main text of the article.
- Each article has the address of the author/s.
- Articles always cite their sources in the form of bibliography or footnotes. These bibliographies contain references to other scholarly writings.

‘Indian Journal of Experimental Biology’ (Fig. 6.1) is an example of a scholarly periodical. Started in 1963, it is published monthly by CSIR-NISCAIR. Besides research articles, it publishes notes and reviews in areas of experimental biology. The latest issue published in January 2013 is Volume 51, issue number 1 with pages 1-86.



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Fig. 6.1 Indian Journal of Experimental Biology

*(b) Trade and Business Periodicals*

Trade and business periodicals are published by trade organizations and commercial publishers.

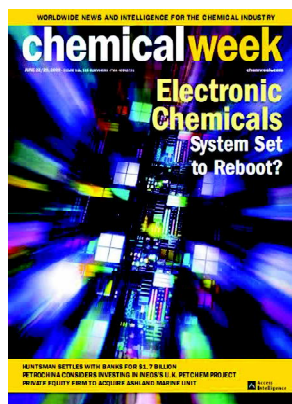
- These periodicals cover articles, news, trends and issues for specific business and industry.
- Authors can be professionals in the field or journalists working for the publisher.
- Articles cover industry trends, new products or techniques. The journal also covers organizational news.
- There are lots of advertisements related to specific industry or trade. Index to the advertisers is also included.
- The periodical is mostly published on glossy paper and has colourful illustrations.
- Though the language of the articles tend to be related to terms specific to industry or trade, the articles are written for general educated audience.

Example of trade and business periodical



Indian Textile Journal

Fig. 6.2



Chemical Week

Fig. 6.3



### Notes

### (c) Popular Periodicals

Popular periodicals are devoted to particular subject area and contain articles on that subject written in simple language.

- Popular periodicals are meant for general public who do not have specialized knowledge of a particular subject.
- These are published to inform, educate and entertain the public
- The purpose of popular periodicals in areas of science and technology is to popularize science.
- These are published by R&D organizations, government departments and commercial publishers.
- Articles are mostly short and sometimes do not contain references.

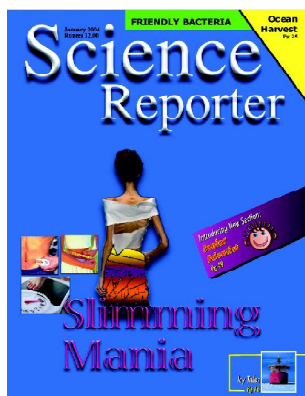
Examples of popular periodicals :

*Science Reporter* (English, Monthly) (Fig. 6.4)

*Vigyan Pragati* (Hindi, Monthly) (Fig. 6.5)

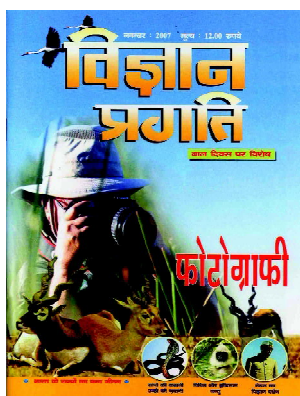
*Science –ki- Dunya* (Urdu, Quarterly) (Fig. 6.6)

Above three periodicals are popular periodicals (also called Popular Magazines) published by CSIR- NISCAIR. These journals publish popular science articles on contemporary science topics.



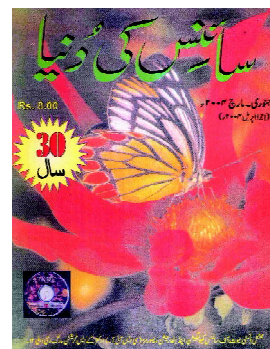
Science Reporter

Fig. 6.4



Vigyan Pragati

Fig. 6.5



Science-ki-Dunya

Fig. 6.6

### (d) Magazines

The magazines are published by newspapers and commercial publishers. These magazines entertain, sell products and give practical information and/or promote a view point.



## Notes

- Content of the magazines include information on popular personalities, news and general interest articles.
- Authors are journalists and freelance writers.
- Glossy covers and lots of colour illustrations and photographs distinguish these magazines from others.
- Advertising is substantial.
- Language is simple and designed to meet a minimal education level.
- Each issue begins with page number one.

## Examples of Magazines



India Today

Fig. 6.7



Filmfare

Fig. 6.8



Business Today

Fig. 6.9

*(e) E-Journals*

E-journal can be defined as any serial produced, published and distributed nationally or internationally via electronic networks. E-journals are also known as paperless journals and online journals. E-journal on CD-ROM is like having printed journal in the library. However, it requires computer and requisite software to read. It has many advantages over print journal. CD-ROM with its storage capacity of over 250,000 pages can provide full text of individual or collected journals of various subjects. Online journals or e-journals on the Internet can be accessed remotely at any time and from anywhere.

Examples of E-journal:

Advances in Natural Science

International Journal of Human Sciences

**6.3.2 Newspapers**

Newspapers publish news of recent happenings on political, social and economic front of a nation, or region. Newspapers are of different kinds. Some of them are local or regional in their orientation and coverage, others are





## Notes

national or international. Some newspapers specialize in economic and financial matters and bring out in depth analysis of trade, banking, commerce, etc. Basic features of general newspapers are as follows:-

- Published daily, weekly or bi-weekly.
- Coverage includes news, current events, advertising and topics of human interest.
- Main purpose is to inform, explain, influence and entertain readers.
- Authors are free-lance writers or journalists, but can also be scholars.
- Articles are generally short. Language is simple and designed to meet a minimum education level.
- Articles are generally illustrated with colourful photographs.
- Advertising can be moderate to heavy.

Examples of newspapers:-

**Times of India:** Published daily and has online edition.

(<http://www.timesofindia.indiatimes.com>)

**Hindustan Times:** Published daily and has online edition

(<http://www.hindustantimes.com>)

### 6.3.3 Technical Reports

Technical reports are research reports which are produced after conducting research on a well defined research area, mostly in the field of science and technology. Such research is usually sponsored by government organizations, industries or other agencies. The researcher who conducts research for sponsoring bodies, write research results in the form of technical report and submit to the sponsoring agency. Technical reports are primary sources of information.

### 6.3.4 Conference Papers

A conference is a gathering/meeting sponsored or organized by a learned body where information is exchanged or discussed by experts in a particular subject or field. Every year, thousands of conferences are organized on various subjects, where experts present their papers. After the conference is over, the conference proceedings are published which contain the papers presented in the conference along with discussions, minutes of the meeting and resolutions adopted. Conference proceedings contain a number of research papers and are primary sources of information.

Example : Proceedings of 8<sup>th</sup> International Convention CALIBER-2011, Goa University, Goa, 2-4 March, 2011

### 6.3.5 Dissertations and Thesis

Dissertation or a thesis is a document submitted by a researcher in support of candidature for a degree or professional qualification. In some universities dissertation and thesis are seen as the same. In some universities dissertation is submitted at the end of one's Master's degree and thesis is submitted at the end of PhD. Both report original research and are considered primary sources of information.

Example: *Digital Light Photography, a thesis submitted to the Department of Computer Science, University of Delhi for award of doctorate degree.*

### 6.3.6 Patents

Patent is granted by a government, which gives a person or a company sole rights to make, use or sell a new invention (which may be a product, process or a design) for a certain number of years. Individuals and companies engaged in R&D activities protect their inventions by patenting them with the government. The government grants the patent and publishes the details of granted patents through an official publication. Indian patents are published in **Gazette of India, Part 3, and Section 2**. Patent documents are primary sources of information.

### 6.3.7 Standards

Standard is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for the required purpose. A standard can be defined as 'a set of rules for ensuring quality of a product, a process or a service.'

Standards are basically of two types:

- i) Fundamental standards, and
- ii) Technical standards

Fundamental standards are related to measurement of length, mass, time, temperature, various forms of energy, force, or other forms of quantifiable fundamental entities that are basic to all scientific and technical practices.

Technical standards are related to product, process, material or service. Standards are primary sources of information.



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**Notes**

Standards ensure that products or services are safe, reliable and are of good quality. Standards help businesses to develop consistent product so that it can be globally accepted and adopted. This encourages international trade. Standards also make it easier to understand and compare competing products.

Example: *ISO 2709: Standard for Bibliographic Record Formats*

**6.3.8 Trade and product bulletins**

Trade and product bulletins are information products brought out by the publishers, manufacturers and distributors of various types of materials, products or services. Trade and product bulletins cover every kind of material, product or service ranging from books, drugs, chemicals, household goods to complex machinery and equipment used in research and industry. The basic purpose of this type of trade literature is to describe various attributes of the product, material or service and promote its sale to the potential customers. Trade and product bulletin are primary sources of information and information reported about specific commercial product is not likely to be published in any other form of literature.

Example: Electronics For You, June 2013.

**INTEXT QUESTIONS 6.1**

1. Define periodical. Enumerate different types of periodicals.
2. Describe standards and state their importance in promoting trade.
3. What are trade and product bulletins and what purpose do they serve?
4. Discuss the basic features of a general newspaper.
5. What is a patent? Where are Indian patents published?

**6.4 SECONDARY SOURCES**

Information published in primary sources on a particular subject is widely scattered and is available in large number of sources like primary periodicals, technical reports, dissertations, conference papers, patents, standards and so on. In addition, the research results are published in different languages. This makes it very difficult for a researcher to keep track of what is latest in his/her field of interest. To solve this problem there are other set of publications called secondary sources. Secondary periodicals, bibliographies, books, reviews, treatises, state-of-the- art reports, reference sources, etc. come under secondary

sources. In this lesson you will study about secondary periodicals, bibliographies and books. Reference sources will be covered in Lesson 7.

### 6.4.1 Secondary Periodicals

Secondary periodicals regularly scan the literature published in primary sources, select the relevant items, arrange them in helpful sequence and bring them to the notice of researchers at weekly, fortnightly or monthly intervals. These publications contain bibliographical references of each item with or without abstracts. A secondary periodical with abstract is an *abstracting periodical* and without abstract is an *indexing periodical*. These publications bring together recently published literature in specific subject discipline scattered over wide range of primary sources.

#### (a) Indexing Periodicals

In indexing periodicals the relevant items with full bibliographical details are selected from primary sources and are arranged either under broad subject headings or under class numbers. This arrangement brings all the items on the same subject together. Bibliographical details help the reader to identify and locate the original document. For example, if the document is a journal article, bibliographical details will provide the name(s) of the author(s), title of the article, title of the journal, its volume number, issue number, year of publication and the page numbers of the article. The indexing periodical also provides author and subject indexes of the items covered.

Example of an indexing periodical :

*The Reader's Guide to Periodical Literature* is an indexing periodical published every month by H W Wilson Company. It covers recently published articles in 400 scholarly journals and popular magazines in a wide range of subjects.

#### (b) Abstracting Periodicals

In an abstracting periodical the contents of the selected items are condensed or summarized (called abstracts) along with bibliographical details of the document which help the reader to identify and locate the original document. The abstract of the article helps the user to decide whether to read the full document or not. At times a well prepared abstract serves as substitute for the original document. Abstracting periodicals also provide author and subject indexes.

Examples of Abstracting Periodicals :



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*Indian Science Abstracts* (ISA) (Fig. 6.10) is a fortnightly abstracting periodical reporting the scientific research work done in India and published in Indian journals. This is published by CSIR- NISCAIR. The periodical covers research and review articles from Indian scientific and technical periodicals, Indian proceedings of conferences, Indian standards and theses.

*Indian Science Abstracts on CD-ROM* is a cumulative database of nearly 200,000 abstracts covering the period from Jan. 1990 to Dec. 1999. Database is searchable by keywords, author, corporate author, ISA issue number and year of publication.

### Indian Science Abstracts Online

From 2000 onward ISA is searchable online at NISCAIR website. (<http://www.isa.niscair.res.in>)

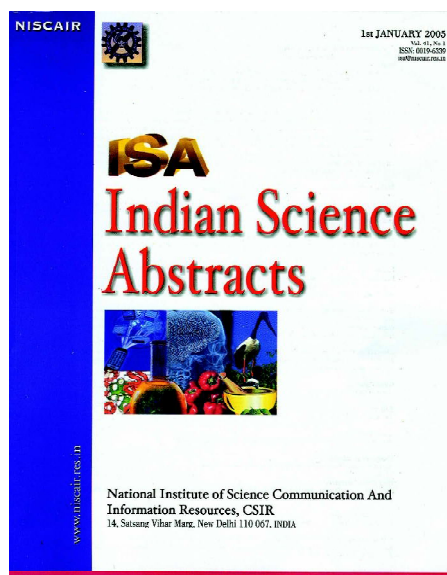


Fig. 6.10 Indian Science Abstracts

Indexing and abstracting periodicals are available in every subject field. At present most of the national as well as international indexing and abstracting periodicals are available in three versions: viz. in Print, CD-ROM, and Online on the Web.

### 6.4.2 Bibliographies

A bibliography is a systematic list of documents that share a common factor that may be a subject, a language, a period, an author or some other criteria. The list may be comprehensive or selective. The list is arranged by some order. Such bibliography, known as enumerative or systematic bibliography, attempts to record or list. Each entry provides bibliographical details of the document.



**An entry for book** contains following information:-

Name (s) of author(s)

Title of the book

Publisher

Date of publication

**An entry for journal contains:-**

Name(s) of author(s)

Article title

Journal title

Volume number, Issue number, Year of publication

Page numbers

**(a) National Bibliography:** A national bibliography lists the publications produced in a country.

Example of national bibliography

*Indian National Bibliography*, compiled by Central Reference Library, Kolkata.

**(b) Trade Bibliography:** Trade bibliographies are brought out by publishers, book sellers, distributors or printers. These bibliographies list books which are meant for sale. Trade bibliographies are used by the libraries to select books for the library. Example of trade bibliography:-

*Indian Books in Print:* A select Bibliography of English Books Published in India published by Indian Bureau of Bibliographies.

**(c) Subject Bibliography:** A subject bibliography lists the documents on a given subject. To carry out literature search and compile a subject bibliography is one of the important services of a library. Sometimes these bibliographies are compiled on regular basis in anticipation of the users' needs. These bibliographies are also compiled on special occasions such as during seminars and workshops to provide the participants with the latest literature on the subject. University and special libraries offer this service more frequently than the public library.

Example: Enser AGS: *A Subject bibliography of the First World War books* in English; n1914-1987, Brookfield, NT Gower, 1990



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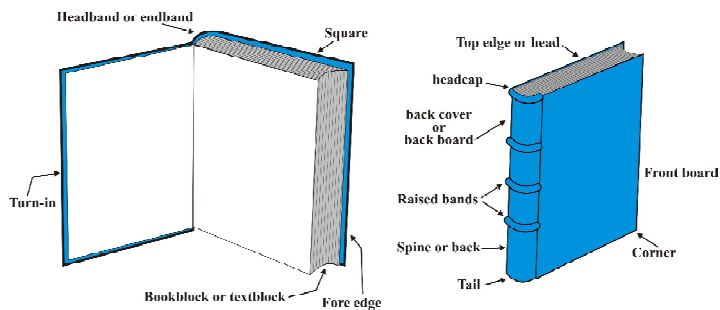
**INTEXT QUESTIONS 6.2**

1. Distinguish between indexing and abstracting periodicals.
2. Define a bibliography and describe its types.

**6.4.3 Books**

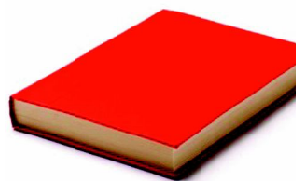
A book can be broadly defined as a written or published document of at least 49 text pages that communicates thoughts, ideas or information. Pages of the book are glued or sewn together along one side, called the spine or back, so that it can be opened at any point. Two covers of the book are joined by hinges to the spine. Books are either hardbound or softbound, depending on the cover. Most of the hardbound books have a cover made of cloth, plastic or leather over cardboard. A paper cover jacket is often added to protect the cover of a hardbound book (Fig. 6.12). Most of the softbound books, called paperbacks, have paper covers (Fig. 6.13) .

**Part of a Book**



**Parts of a Book**

**Fig. 6.11**



**Hardbound Book**

**Fig. 6.12**



**Softbound Book**

**Fig. 6.13**

A book can be distinguished from a pamphlet and a manuscript as follows:-

**Pamphlet**

A pamphlet is an unbound printed publication with no cover or with paper cover. A pamphlet has a minimum of 5 pages and a maximum of 48 pages, exclusive of the cover pages.

**Manuscript**

Manuscript is a term used for any document written or typed by a machine such as typewriter or computer. The word is often used to distinguish an author's original version of a work (which may be a book, an article or any other work) from the printed copy.



In addition, manuscript refers to any handwritten documents from ancient times until the introduction of printing in 1400s. Such manuscripts are called '*historical manuscripts.*' Most historical manuscripts can be traced to certain times or areas by the material on which they were written. You have studied about different types of material in Lesson 5 of this course.

### (a) Book Types

Books are important sources of information and libraries acquire them based on the needs of the users. Based on the contents, a book may be a simple book or a composite book; single-volume book or multi-volume book; fiction book or nonfiction book; a text book or a treatise. Based on the physical format, a book may be in print or non-print medium. Books in non-print medium include audio books, video books, multimedia books and e-books.

### Simple Vs Composite Book

If the treatment of subject is continuous and written by one or more than one authors, the book is a simple book. When each chapter of the book is written by different authors and the subject may or may not be dealt continuously, the book is called a composite book.

Example of Simple book: *The Digital Scholar* by M. Weller

Example of Composite book: *Impact of Open Courseware for Higher Education in Developing Countries- a collection of 10 articles.* Edited by S. Evans and M.L. Smith

### Single-Volume Vs Multi-Volume Book

A book in one volume is known as single-volume book. A book in more than one volume is called multi-volume book. Besides this, there is continuous pagination in different volumes of the set.

Example of Single-volume book: *Scholarly Communication* by S. I. Gillenson

Example of Multi-volume book: *The Handbook of Artificial Intelligence, Volumes 1-4* by A. Barr & E. A. Feigenbaum

### Reference Book

A reference book provides answers to brief facts, statistical information, background information, or directs you to additional information source. It is a book meant only to be consulted or referred to for some specific piece of information and are not meant for continuous reading. Reference books include



### Notes

dictionaries, encyclopaedias, handbooks, yearbooks, almanacs, directories, biographical and geographical sources.

*Examples: The Oxford Dictionary of Quotations, World Book Encyclopaedia, The Statesman's Year-Book, The World Book Atlas*

### Fiction Vs Nonfiction Book

Fiction books are story books, novels and other prose writings that tell about imaginary people and happenings. Nonfiction books are about real things, people, events and places. Subject books, reference book etc. are nonfiction books. In a library, fiction books are arranged alphabetically by author's last name, so that books by the same authors are kept together. Nonfiction books are arranged by their class number, (each subject is given a class number) so that all the books on the same subject are kept together.

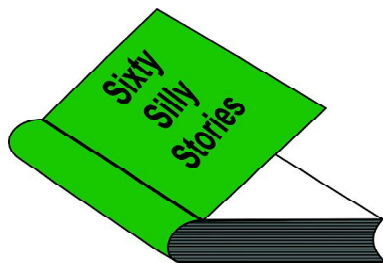


Fig. 6.14 : Fiction book

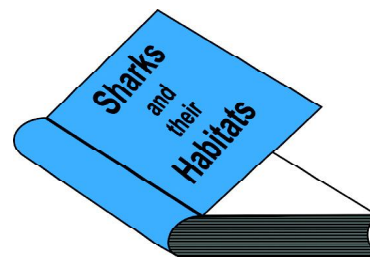


Fig. 6.15 : Non-Fiction book

### Textbook Vs Treatises

A textbook is a book for regular study by a student and is meant to be used as a standard book in the study of a particular subject. Textbooks are designed to inform in a systematic manner and generally begin by introducing concepts and continue on to give more details of the subject. Most books used in schools for different subjects (such as arithmetic, geography, history, science etc.) and for different classes are textbooks. Textbooks are graded and instructional in nature and are designed keeping in view the comprehension level of students in each grade. Students use textbooks to gain knowledge about various subjects and teachers use textbooks to teach and prepare various class assignments.

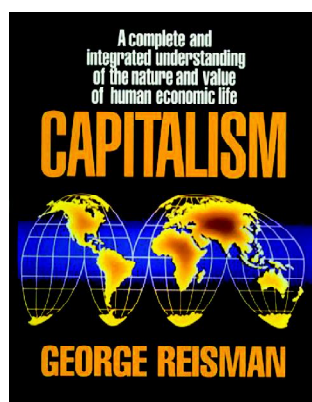
### Treatises

A treatise is a formal in depth treatment of a subject. Treatises are meant for scholars for advanced study. Example of treatise, *Capitalism: A treatise on Economics*. (Fig. 6.16)





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(Courtesy: Amazon .com)

Fig. 6.16

*(b) Inside a Book*

Inside the front cover of a typical book is a collection of pages called preliminary material which includes *Title Page*, *Copyright page*, *Acknowledgement page*, *Dedication page*, *Preface* and *Table of Contents*. This is followed by the body of the book i.e. the *Text*. At the end of the Text are pages containing *Glossary*, *Bibliography and Index*.

**Title Page:** The page at the beginning of the book usually contains the title of the book, name(s) of the author(s), and publisher.

**Copyright Page:** Contains the name of the publisher and date of publication.

**Acknowledgement Page:** Expresses author's gratitude to persons who helped him/her to write the book.

**Dedication Page:** Tells to whom the author dedicates the book.

**Preface:** Also called *Foreword* or *Introduction*, where the author states the aim of writing the book and describes its important features.

**Table of Contents:** The list of contents, arranged by chapters with their page numbers.

**Text:** The body of the book which is usually divided into units or chapters.

**Glossary:** List of important words used in the book together with their meaning

**Bibliography:** List of books, articles, etc. used by the author as sources of information.

**Index:** Alphabetical list of names of persons, places and topics discussed in the book with their corresponding page numbers.



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## INTEXT QUESTIONS 6.3

1. Define a book. Differentiate between a book, manuscript and a pamphlet.
2. State the difference between a textbook and a treatise.

## 6.5 TERTIARY SOURCES OF INFORMATION

Tertiary sources are based on primary and secondary sources and serve as key to the primary and secondary sources. These sources consist of information which is a distillation and collection of primary and secondary sources. Tertiary sources are third in the order of appearance. First in the order of appearance are primary sources, next are secondary sources and then come the tertiary sources. Tertiary sources help to locate primary and secondary sources. Sources like bibliography of bibliographies; guides to the literature; directories listing primary and secondary periodicals etc, are placed under tertiary sources.

Some examples of tertiary sources are listed below:-

*Bibliographic Index: A Cumulative Bibliography of Bibliographies.* N.Y. H. W. Wilson Company: 1937 to date

*Walford's Guide to Reference Material.* 8<sup>th</sup> ed. London: Library Association. 3 Volumes.

## 6.6 ELECTRONIC SOURCES

Electronic publications are those publications which require use of a computer to access the information they contain. Electronic publication can be off-line or on-line. Off-line electronic publication is the publication which is stored in machine readable form on an electronic storage medium like CD-ROM, DVD, Diskette or magnetic tape etc and can be accessed using computer and requisite software. Online electronic publication is an electronic document which is accessible online on the Internet, for example an electronic journal, a World Wide Web page, or online databases.

Most of the sources we have discussed above are available in both, print and electronic form. Some of the sources which were in print form earlier are now available in electronic form only. For example, *Library and Information Science Abstracts* and *Guide to Reference Books* are published and distributed electronically only.

The advantages and limitations of electronic sources over print sources are as given below:-

**Notes****6.6.1 Advantages of Electronic Sources over Print Sources**

- Electronic sources are more frequently updated than their print counterpart.
- They provide more search options.
- Provide access to wider range of information.
- Provide faster and easy access to information. Particularly in the case of indexing and abstracting periodicals, where back volumes are consolidated into single searchable database, search is easy and extremely fast.
- Online resources provide linkages from citations to full text e-journals.
- Full-text data can be delivered instantly on the remote computer.
- Electronic resources can be delivered in multimedia format where text, video and sound can be added.
- A print source can be used by one person at a time, whereas an online electronic source can be accessed simultaneously by many users.
- An online electronic source can be accessed at any time and from any place where network exists.
- Back volumes of print periodicals need to be bound and stored. This calls for lots of expenses and plenty of storage space. Whereas, e-journals are accessible online, they need not be bound or stored. Even electronic resources on CD-ROM occupy very little space.
- Missing issues, missing pages and other damages caused by mishandling of print sources do not occur in electronic sources.

**6.6.2 Limitations of Electronic sources**

- Use of electronic sources require expensive infrastructure which must be acquired, maintained and upgraded. This includes computer hardware and software, Internet connection and subscription to electronic resources.
- Electronic sources, despite being user friendly, require certain degree of computer knowledge to get maximum benefit from them. This means libraries have to incur expenses to train their staff as well as the users to use the resources.
- Most of the publishers of e-publications sell their products under license agreement. The license agreement imposes a number of restrictions on the user in the use of e-resources.
- Reading from the computer screen causes discomfort to the users. Most of the users prefer to take print out of the article for reading and do most of the reading from print publications.

**Notes**

Though advantages of electronic sources are far more than their limitations, but they are not likely to replace print sources in the foreseeable future. People still prefer to read newspapers, books and many other sources in print form.

Thus, electronic sources will not substitute but supplement print sources.

**INTEXT QUESTIONS 6.4**

1. What are electronic sources of information?
2. Mention two advantages and two disadvantages of using electronic sources

**WHAT YOU HAVE LEARNT**

- Primary sources of information contain original information and are in large number and widely scattered. Primary sources comprise primary periodicals, newspapers, technical reports, conference proceedings, patents and standards.
- A periodical or journal is a serial publication which is published with definite periodicity under the same title and intended to publish indefinitely. The information in periodicals is more timely, current and up-to-date, than information in books. Periodicals are of many types such as scholarly periodicals, trade and business periodicals, popular periodicals and magazines.
- E-journal is a serial produced, published and distributed nationally or internationally via electronic networks. E-journals are also known as paperless journals and online journals.
- Newspapers publish news of recent happenings on political, social and economic front of a nation, or region. Newspapers are of different kinds. Some of them are local or regional in their orientation and coverage, others are national or international.
- Conference proceedings contain number of research papers and are primary sources of information.
- Dissertation or a thesis is a document submitted by a researcher in support of candidature for a degree or professional qualification.
- Technical reports are research reports which are produced after conducting research on a well defined research area, mostly in the field of science and technology.



### Notes

- Standard is a document that provides set of rules for ensuring quality of a product, process or a service.
- Patent is a government grant which gives a person or a company sole rights to make, use or sell a new invention (which may be a product, process or a design) for a certain number of years. The government grants the patent and publishes the details of granted patents through an official publication.
- Secondary sources are based on primary sources and they present the contents of primary sources in condensed form and list them in helpful way, so that the existence of primary documents is known and access to them is made easy.
- A secondary periodical with abstract is an abstracting periodical and without abstract is an indexing periodical. These publications bring together recently published literature in specific subject discipline scattered over wide range of primary sources.
- A bibliography is a list of documents that share a common factor that may be subject, a language, a period, an author or some other criteria. The list may be comprehensive or selective. A national bibliography lists the publications produced in a country. Trade bibliographies are brought out by publishers, book sellers, distributors and printers. A subject bibliography lists the documents on a given subject.
- A book is a written or published document of at least 49 text pages that communicates thoughts, ideas or information. A pamphlet is an unbound printed publication with no cover or with paper cover. A pamphlet has minimum of 5 pages and maximum of 48 pages.
- Tertiary sources are based on primary and secondary sources and serve as key to the primary and secondary sources. Tertiary sources help to locate primary and secondary sources. Sources like bibliography of bibliographies; guides to the literature; directories listing primary and secondary periodicals, etc. are placed under tertiary sources.



### TERMINAL QUESTIONS

1. Briefly describe each category of primary sources of information?
2. Distinguish between indexing and abstracting periodicals. Discuss their significance as secondary sources of information.
3. Describe electronic sources of information and list their advantages over printed sources.

**Notes****ANSWERS TO INTEXT QUESTIONS****6.1**

1. A periodical is a serial and can be defined as a publication which is published with definite periodicity (weekly, fortnightly, monthly, or quarterly etc.) under the same title, and intended to be published indefinitely. Each issue is dated and consecutively numbered. All the issues in a volume have continuous pagination. There are scholarly periodicals, trade and business periodicals, popular periodicals and E-journals.
2. Standard is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for this purpose. A standard can be defined as 'a set of rules for ensuring quality of a product, a process or a service. Standards ensure that products or services are safe, reliable, and are of good quality. Standards help businesses to develop consistent product so that it can be globally accepted and adopted. This encourages international trade.
3. Trade and product bulletins are information products published by manufacturers and distributors of various types of materials, products or services, ranging from books, drugs, chemicals, household goods to complex machinery and equipment used in research and industry. The basic purpose of this type of trade literature is to describe various attributes of the product, material or service and promote its sale to the potential customers.
4. Newspapers publish news of recent happenings on political, social and economic front of a nation, or region. Basic features of general newspapers are as follows:-
  - Published daily, weekly or biweekly.
  - Coverage includes news, current events, advertising and topics of human interest.
  - Main purpose is to inform, explain, influence and entertain the readers.
  - Authors are free-lance writers or journalists, but can also be scholars.
  - Articles are generally short. Language is simple and designed to meet a minimum education level.
  - Articles are generally illustrated with colourful photographs.
  - Advertising can be moderate to heavy.

**Notes**

5. Patent is granted by government which gives a person or company sole rights to make, use or sell a new invention (which may be a product, process or a design) for a certain number of years. Individuals and companies engaged in R&D activities protect their inventions by patenting them with the government. The government grants the patent and publishes the details of granted patents through an official publication. Indian patents are published in Gazette of India, Part 3, and Section 2.

**6.2**

1. Indexing and abstracting periodicals scan the literature published in latest primary sources, select the relevant items, arrange them in helpful sequence and bring them to the notice of researchers at weekly, fortnightly or monthly basis. These publications contain bibliographical references of each item with or without abstracts. A periodical with abstract is an abstracting periodical and without abstract is an indexing periodical. These publications bring together recently published literature in specific subject discipline scattered over wide range of primary sources.
2. A bibliography is a list of documents that share a common factor that may be subject, a language, a period, an author or some other criteria. The list may be comprehensive or selective and arranged in some order. Bibliographies are of three types, National Bibliography, Trade Bibliography and Subject Bibliography. A national bibliography lists the publications produced in a country. Trade bibliographies are brought out by publishers, booksellers and distributors. These bibliographies list books which are meant for sale. A subject bibliography lists books on a given subject.

**6.3**

1. A book can be broadly defined as a written or published document of at least 49 text pages that communicates thoughts, ideas or information. Pages of the book are glued or sewn together along one side, called the spine or back, so that it can be opened at any point. An unbound printed publication with less than 48 pages is called a pamphlet. A typewritten or hand written version of a book, an article or other work, especially author's own copy, prepared and submitted for publication is called a manuscript.
2. A textbook is a book for regular study by a student and is meant to be used as a standard book in the study of a particular subject. Textbooks are graded and instructional in nature and are designed keeping in view the comprehension level of students in each grade. A treatise is formal work on a subject, dealing with in depth treatment of a subject. Treatises are meant for scholars for advanced study of a subject.





### Notes

### 6.4

1. Electronic sources of information are those sources which require use of a computer to access the information they contain. An electronic source can be off-line or on-line. In off-line electronic source the information is stored in machine readable form on an electronic storage medium like CD-ROM, DVD, Diskette or magnetic tape etc and can be accessed using computer and requisite software. Online electronic source is an electronic document which is accessible online on the Internet, for example an electronic journal, a World Wide Web page, or online databases.
2. Electronic sources are frequently updated and require very little storage space. Expensive infrastructure required to access these resources and stringent license agreement restrict their use.

### GLOSSARY

**Multimedia:** Use of different media to convey information. Multimedia includes text, together with pictures, audio and video either on CDROM or on web pages.

### SUGGESTED ACTIVITIES

1. Go to a library. Select a fiction and a non-fiction book. Note down the title, subtitle, author(s), and publisher of each book. See through preliminary pages, content page, and body of each book. Write down the differences that you observe in presentation of information in both the books.
2. Go to a library. Select a scholarly periodical, popular periodical and a magazine. Write down the title, year of publication, and publication frequency of each. Find out the name of the publisher and list the contents of the periodicals from the content page. Write down the differences you observe in each category.

