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# Subject: Library and Information Science

Production of Courseware

-Content for Post Graduate Courses



**Module : 04** Reference Sources: Use and Evaluation Criteria, e-Information Sources









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## Module 4: Reference Sources: Use and Evaluation Criteria, E-Information Sources

# I. Objectives

• To learn about the types, characteristics and uses of reference sources, to know about the concept of e-information sources, to understand the evaluation criteria.

# **II. Learning Outcome**

After studying this module, you will learn about the types, characteristics and uses of reference sources. You will be able to define reference sources, know about their need and become capable of differentiating reference sources from other information sources. You will also learn about the concept of e-information sources, and understand the evaluation criteria of reference sources. Lastly, you will be acquainted with various reference sources, viz. Dictionary, Thesaurus, Encyclopedia, Yearbook, Almanac, Directory, Handbooks, Manuals, Biographical information sources; Bibliographies; Indexing and Abstracting Periodicals, and Databases.

## III. Module Structure

- 1. Introduction
- 2. Reference Sources/Books
  - 2.1 Categories of Reference Sources
    - 2.1.1 Dictionary
      - 2.1.1.1 Uses of Dictionaries
    - 2.1.2 Encyclopedia
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- 3. Evaluation of Reference Sources
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  - 4.1 Advantages of Electronic Reference Sources
  - 4.2 Limitations of Electronic Reference Sources
- 5. Summary
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#### 1. Introduction

A reference source provides answers to brief facts, statistical information, background information, or directs the searcher to additional information source. The reference librarians usually provide reference services on the basis of reference sources in their collection.

The ALA Glossary of Library and Information Science provides a functional definition of reference sources as "A book designed by the arrangement and treatment of its subject matter to be consulted for definitive items of information rather than to be read consecutively."

#### 2. Reference Sources/Books

Reference sources are used for providing 'Ready Reference' service to the library users and for locating original documents on specific subject or topic. In most libraries, these books are not issued and are located in a separate reference collection. This practice makes reference sources readily available and easily accessible. Most of the reference books are specifically designed to provide required information quickly and in most convenient form.

Although, the term 'reference book' is frequently used, reference sources may be books, serials, online databases or internet. Reference books include dictionaries, encyclopedias, handbooks, manuals, yearbooks, almanacs, directories, biographical and geographical sources.

Bibliographies, indexing and abstracting periodicals and databases also come in the category of reference sources, as they are used for locating original documents on specific subject or topic.

Librarians develop catalogues, bibliographies and subject guides, which also serve as in-house reference tools to facilitate access to resources of the library.

## 2.1 Categories of Reference Sources

In the following sections different categories of reference sources, their characteristics and uses are discussed.

## 2.1.1 Dictionary

Dictionary is a book containing words of a language arranged alphabetically with their meanings. Most dictionaries list pronunciations, grammatical labels, illustrative quotations, synonyms, antonyms, usage notes, etymology and other information. Some dictionaries give derivation and history of the words too. The ancient Greeks and Romans were the first to produce dictionaries. But most Greek and Latin dictionaries were either lists of rare and difficult words or specialized list of words.

The other reference books which deal with words are thesaurus and glossary. Thesaurus is a book in which words that have the same or similar meaning (synonyms and sometimes antonyms) are grouped together. In contrast to dictionary, which helps to find meaning and pronunciation of the words, thesaurus helps to find most appropriate word to express an idea and also other related

words. Roget's Thesaurus is most widely used English language thesaurus developed by Dr. Peter Mark Roget in 1852. The first edition had 15,000 words. Each new edition has been larger. Roget's II: The New Thesaurus, 3<sup>rd</sup> Edition is free online searchable thesaurus with 260,000 synonyms and cross references with word definitions. The thesaurus also has hyperlinked category index. (http://www.enwikipedia.org/) (http://www.education.yahoo.com/)

A glossary is an alphabetical list of words related to a specific subject, text or dialect with explanation. A glossary is usually provided at the back of the book showing the definitions of technical terms in that particular field of knowledge used in that book. You will learn in detail about dictionaries in Module -5.

## 2.1.1.1 Uses of Dictionaries

Based on the number of words, scope and coverage of other items of information, the dictionaries can be categorized into four following groups:

- General Language Dictionaries
- Subject Dictionaries
- Special Dictionaries
- Bilingual and Multilingual Dictionaries

The above four groups of dictionaries are discussed below:

# • General Language Dictionaries

General language dictionaries cover all the words of a language and give meanings, definition, and explanation of the words in the same language. The language may be English, French, Hindi, German or Russian. General language dictionary can be further divided according to size and target user group.

According to size, general language dictionary may be:

- a. Comprehensive/Unabridged,
- b. Pocket dictionary,
- **a.** Comprehensive/Unabridged dictionary: It covers all the words of a language, including past as well currently in use words. For example, Merriam-Webster's Third New International Dictionary of the English Language is in 3 volumes and has over 450,000 entries. Online version of this dictionary is Merriam-Webster Unabridged-Online Dictionary. (http://www.merriam-webster.com)
- **b. Pocket dictionary**: A dictionary that is small enough to carry in the pocket for quick reference. The dictionary covers 40,000 to 60,000 words that are currently in use. For example, **Merriam-Webster's Pocket Dictionary** has 40,000 entries.

According to target user's age, general language dictionary may be for: i) School children

(ranging from kindergarten to high school children), ii) College students, and iii) Adults.

**Children's dictionaries** cover words related to the course curriculum. The meanings and definitions are written in simple language which children can comprehend. Children dictionaries also include more illustrations to make children understand the concept. **Merriam-Webster's School Dictionary** includes more than 100,000 words, nearly 1,000 illustrations and about 15000 usage examples.

Most of the reputed publishers of unabridged standard general language dictionaries bring out abridged, desk, college, and children edition of their dictionaries. Publishers of these dictionaries try to do continuous revision. With each new printing they add or delete a given number of words. This is particularly true for desk dictionaries which are used by young people and must reflect current usage and new words introduced into the language via radio, television, music, technology and like.

# • Subject Dictionaries

Subject dictionaries concentrate on the definition of the terms in a given subject. Subject dictionaries are becoming increasingly common, due to increase in study and research in different subject areas ranging from arts, humanities, social sciences to science and technology. For example, **McGraw-Hill Dictionary of Scientific and Technical Terms**, 6<sup>th</sup> edition, is a comprehensive dictionary of scientific and technical terms covering over 115,000 terms and 125,000 definitions in 104 areas of science and technology. <a href="http://www.mcgrawhill.ca">http://www.mcgrawhill.ca</a>)

## • Special Dictionaries

The special dictionaries deal with special types or special aspect of the words. Special type or class of words includes obsolete words, acronyms, abbreviations etc. Special aspect of the word includes linguistic aspect of the words (such as pronunciation, synonym and antonyms, etc.), or literary aspect of the words (such as quotations, idioms, proverbs, etc.). Though most of these aspects of the words are covered by general language dictionaries as well, but special dictionaries cover these aspects much more comprehensively. Special dictionaries supplement general language dictionaries. Examples of special dictionaries are as follows:

**Cambridge English Pronouncing Dictionary.** This dictionary provides spoken British and American pronunciation for every word. Cambridge dictionary is also available for mobile phones.

**Cambridge Idioms Dictionary.** This dictionary explains the meaning and use of over 7000 idioms in British, American and Australian English.

**The Oxford Dictionary of Quotations.** This dictionary lists short quotations that are common in English language and culture.

## • Bilingual and Multilingual Dictionaries

The bilingual dictionaries give meaning of a word from one language to another language. For example, an English-Hindi dictionary will list words in English and give equivalent words in Hindi. This type of dictionary is called bilingual dictionary. A multilingual dictionary gives meaning of a word in more than two languages. These dictionaries are also called translating dictionaries.

These dictionaries generally do not define the words, but translate the words from one language to another language. Many of them are limited in scope to certain subject fields such as astronomy, biology, electronic, etc. Examples of bilingual and multilingual dictionaries include the following:

Oxford University Press brings out a number of bilingual and multilingual dictionaries.

**Concise Oxford Spanish Dictionary,** 4<sup>th</sup> edition published in 2009, is comprehensive English-Spanish and Spanish-English dictionary with 175,000 words and phrases and over 200,000 translations. The dictionary has online edition as well. (<a href="http://www.oup.com/">http://www.oup.com/</a>)

**Multilingual Biomedical Technical Dictionary:** (in English, Spanish, Portuguese, French, German, Swedish and Dutch). The dictionary covers over 40,000 entries with about 40,000 synonyms and details each, in seven languages.

**Shabdkosh- English-Hindi Dictionary** (http://www.shabdkosh.com) the site provides English to Hindi as well as Hindi to English translation.

Many sites offer free translation facility on the Web. Listed below are some of these sites: <a href="http://www.freetranslation.com/">http://www.freetranslation.com/</a>
<a href="http://www.babylon.com/">http://www.babylon.com/</a>

## 2.1.2 Encyclopedia

A well planned general encyclopedia presents facts about humanity, human beliefs, ideas, and achievements; about the world people live in; and about the universe to which they belong. It presents these facts using language that is easy to understand.

Different articles in an encyclopedia vary in length ranging from a paragraph to over hundred pages depending upon the topic covered; target audience and type of encyclopedia (whether single volume or multivolume encyclopedia). Articles in standard encyclopedia are written by subject specialists and then edited by the encyclopedia staff editors to conform to policies of the encyclopedia in terms of content, style and punctuation. Editorial staff ensures that each article in the encyclopedia has similar writing style, headings and sub-headings. Pictures and diagrams are included wherever necessary to clarify the concepts and enhance learning process. Most encyclopedias are arranged alphabetically from A to Z. Some are topically arranged, such as one volume may be devoted to 'Animals', another to 'Plants', 'Earth' and Universe', or some other subjects.

## 2.1.2.1 Types of Encyclopedias

Encyclopedias can be broadly divided into two types, viz. General Encyclopedias and Subject Encyclopedias. General Encyclopedia covers all fields of knowledge, for example, Encyclopedia Britannica. Subject Encyclopedia covers either single subject such as Encyclopedia of Physics or group of subjects such as Encyclopedia of Science and Technology.

# a. General encyclopedia can be further categorized according to

- Size (single volume-set or multivolume-set), and
- Target users (for adults, students or children).

Most of the publishers of general encyclopedias bring out different sets of encyclopedias for adults, students and children of various age groups. Articles in Children's encyclopedias are written in simple language and with illustrations to make the topic clear and understandable.

## **Examples of Encyclopedias**

**Encyclopedia Britannica** is a general English language encyclopedia, published by Encyclopedia Britannica Inc. The set contains 73,645 articles. The articles are aimed at educated adults and are written by about 100 full time editors and more than 4000 expert contributors. It is regarded as most authoritative and scholarly encyclopedia. The 2010 Edition of the encyclopedia in print consists of following 32 volumes:

- 12- Volume Micropedia with short articles (generally fewer than 750 words) for ready reference:
- 17-Volume Macropedia with long articles (ranging from two to 300 pages) for in-depth study of a topic.
- One-Volume Propedia giving outline of knowledge; and
- 2- Volume Index.

**Single Volume Britannica Concise Encyclopedia** has 28,000 short articles condensing the larger 32-Volume Britannica.

**Britannica Student Encyclopedia**: The 16-volume Britannica Student Encyclopedia has more than 2,300 articles with 3,300 photos, illustrations, charts and tables to make students understand the concept and subjects. The encyclopedia has 1,000 maps and flags of various countries of the world.

Recent advances in information technology and rise of electronic encyclopedias such as Microsoft Encarta and Wikipedia has reduced the demand for printed encyclopedia. The publisher of the Encyclopedia Britannica has developed electronic version of the encyclopedia on CD-ROM, DVD and World Wide Web.

**Encyclopedia Britannica Online** contains the text of 32-volume Encyclopedia Britannica plus

additional articles and images not available in the print set. It has more than 120,000 articles. The site offers natural language searching and A-Z browsing facility. It is continually updated to provide most current information. It has daily features, updates and links to news reports from The New York Times and the BBC. Subscriptions are available on yearly, monthly or weekly basis. Special subscription plans are offered to schools, colleges and libraries. (http://www.britannica.com/)

## Wikipedia

It is a multilingual, web based free content encyclopedia supported by Wikipedia Foundation and based on open editable model. Wikipedia is written collaboratively by internet volunteers (about 77,000 contributors) who write without any remuneration. Since its creation in 2001, Wikipedia has grown rapidly into one of the largest reference web site attracting millions of visitors. There are more than 30 million articles in 285 languages, of which there are over 4 million articles in English. (http://www.en.wikipedia.org/wiki/Wikipedia:About)

## b. Subject Encyclopedias

Subject encyclopedia provides detailed information on specific area of knowledge such as arts and humanities, science and technology, social sciences, etc. There are thousands of subject encyclopedias ranging from broad subject area to a very narrow subject field. There are multivolume as well as single volume subject encyclopedias. Some subject encyclopedias are meant for subject specialists and some are for students and general readers interested in that subject.

## **Examples of Subject Encyclopedia**

McGraw Hill Encyclopedia of Science and Technology, 11<sup>th</sup> edition, is an English language 20-volume encyclopedia specifically focused on scientific and technical subjects. The encyclopedia covers life sciences, physical sciences as well as engineering and technology topics. The McGraw Hill's 'Access Science' website provides online access to this encyclopedia. The site provides full content of encyclopedia articles, includes 13,000 illustrations, and 135 articles with animation. In addition, it provides full text of the Year Book of Science and Technology from 1998 to 2003. The site is updated daily.(http://www.accessscience.com)

McGraw Hill Concise Encyclopedia of Science and Technology is one-volume set based on the full set. The latest version is 6<sup>th</sup> edition published in 2009. (http://www.mhprofessional.com)

Encyclopedia of Library and Information Science, edited by Allen Kent and published by Marcel Dekker, is a 35-volume set (33-volume main encyclopedia and 2-volume index) providing librarians, information/computer scientists, and students of library and information science convenient access to tools and techniques of both library and information science. The articles are written by over 1300 subject experts. The encyclopedia is regularly bringing out supplements (each supplement contains A-Z coverage). The supplements highlight new trends, describe the latest advances and give information about people making crucial contributions to this rapidly growing field. So far 36 supplement volumes have been published (Volume- 36 to Volume- 72).

#### 2.1.3 Yearbooks

Yearbook, as the name indicates, is a book of information that is updated and published annually, i.e., every year. The basic purpose of a yearbook is to record events and developments of the previous year in a country or in the world. Based on their scope and type of information covered yearbooks can be categorized as:

- a. International Yearbook
- b. National Yearbook
- c. Subject Yearbook
- **a. International Yearbook** provides reliable and handy statistical information about each country of the world. For example, **The Statesman's Yearbook 2014** published by Macmillan, provides political, economic and social account of every country (194 countries) of the world together with facts and analysis. The Yearbook is in two parts: Part-I deals with International organizations, and Part-II deals with countries of the world in alphabetical order. Online version of Statesman's Yearbook, in addition to the full-text of its print edition, covers additional features, such as monthly up-dates and highlights, economic overview and access to past editions of the Statesman's Yearbook from 1864 onward. (http://www.statesmansyearbook.com)
- **b. National Yearbook** provides up to date political, economic and social account of an individual country. National yearbooks are mostly compiled by the respective government of that country and are considered reliable and authoritative. For example, **India 2011: A Reference Annual**, 55<sup>th</sup> edition, is a national yearbook published by Publication Division, Ministry of Information and Broadcasting, Government of India. The yearbook provides information on various subjects related to India like economy, rural and urban development, industry and infrastructure, arts and culture, S & T, health, defense, mass communication, etc. (<a href="http://www.publicationsdivision.nic.in">http://www.publicationsdivision.nic.in</a>)
- **c. Subject Yearbook**: A yearbook devoted to specific subject or group of subjects is a subject yearbook. McGraw-Hill Year Book of Science & Technology- 2014 is an example of subject yearbook.

## 2.1.4 Almanac

Almanac is a reference book usually published once a year and contains many kinds of information. Almanacs originally provided a calendar of the months with eclipses, the movement of planets and the rising and setting of sun, moon and stars.

Present day almanacs include a comprehensive presentation of statistical and descriptive data covering the entire world. Major topics covered are geography, government, demographic data, agriculture, economics and business, health and medicine, S&T, transport, sports, awards and prizes. Contents also include articles focusing on events of previous year as well as summary of recent events. Now the almanacs are more like yearbooks. Both depend on government sources for statistical data. The only difference is that almanacs present astronomical data, which is absent in the yearbooks.

Examples of almanacs:

**World Almanac and Book of Facts 2014** published annually in U.S.A. by Barnes & Noble. (http://www.worldalmanac.com/)

**Whitaker's Almanack 2014** published annually in U.K. by A&C Black Publishers. (http://www.whitakarsalmanack.com/)

#### 2.1.5 Handbook

The word handbook is derived from German word 'Handbuch' meaning a small book giving useful facts. The literal meaning of the term 'handbook' is a book which is 'handy' to use as it contains useful facts and handy to carry it conveniently. Handbook by definition is a concise reference book providing specific information or instruction about a topic or a subject. Subject handbook basically gives brief information such as facts on a subject. They are designed to be easily consulted and provide quick answers. Handbooks are widely used by practitioners and specialists working in an industry or a laboratory.

CRC Press brings out large number of handbooks for practitioners. Some of the examples are: **Handbook of Chemistry and Physics; Handbook of Lipid Bilayers**. (<a href="http://www.crcpress.com">http://www.crcpress.com</a>)

#### **2.1.6 Manual**

Term 'manual' is derived from Latin term 'manuals' meaning a guide book. Manual basically provides step-by-step instructions on how to do a particular job or operate a particular machine. When a customer buys any home appliances, such as a television, an air conditioner, an oven or even a mobile phone, he/she is provided with a manual which gives proper instructions on how to use that appliance. For example, a cookbook or a book providing step-by-step instructions to assemble a computer is a manual.

## 2.1.7 Directory

A directory is a list of names and addresses of people and organizations. Directories are also very important reference tools in the library to answer directory type of enquiries from the users. Directories can be broadly categorized as:

- General Directories, and
- Special Directories.

#### a. General Directories

Telephone directory comes under the category of **general directories.** You must be familiar with telephone directory. Every city in a country has telephone directory giving information about

telephone numbers of the subscribers. It also provides addresses along with the telephone numbers of the subscribers. These directories are usually compiled by post and telegraph departments.

## **b.** Special Directories

Directories of organizations are called special directories and can be broadly grouped into following three types:

- Directories of academic and research institutions;
- Professionals Directories: and
- Trade and business directories

**Directories of academic institutions** list institutions of higher education and learning such as universities and colleges. Under each academic institution, information provided is, the type of courses and facilities offered, eligibility criteria, names of the senior staff members, etc. These directories may be international or national in coverage. For example, The Europa World of Learning 2013, 63<sup>rd</sup> edition, is an international directory. It is a comprehensive guide to 33,000 academic institutions of higher education and research in the world. The directory is available in print and online form. (http://www.routledge.com/)

**Universities Handbook:** 32<sup>nd</sup> edition published by Association of Indian Universities (AIU) in two volumes is a national directory listing 341 university level institutions in India. Published every alternate year, the directory provides information on the type of courses offered, duration of the courses, eligibility criteria, last date for admission, library and research facilities, scholarship and fellowships, names of professors and senior staff members.

**Professionals Directories:** There are thousands of learned societies and associations in the world, in almost every significant field of knowledge. Members of these associations are scholars in their respective area of specialization. These associations also compile directories listing details of their members. Example: The University of Adelaide Professional Directory.

**Trade and Business Directories:** These directories provide information about trade, business and industries. For example:

**Kothari Industrial Directory of India**, 40<sup>th</sup> edition, 1996, is trade and business directory published by Kothari Enterprises.

# 2.1.8 Geographical Information Sources

Geographical information sources include maps, atlases, globes, gazetteers, and guide books. These sources provide information about places, people, rivers, mountains, forests, lakes etc. To meet information needs of the users, libraries maintain geographical information sources in their reference collection. Though other reference sources like dictionaries, encyclopedias, yearbooks and almanacs also include information about places, people, etc., but they cover only selected and prominent places.

This special collection of geographical information sources covers these topics more comprehensively and is specifically designed to locate the information quickly. This collection comprises the following three types of sources:

- Maps, Atlases and Globes;
- Gazetteers; and
- Guide Books

**a. Maps, Atlases and Globes:** Map is a pictorial presentation of earth's surface or part of it, showing countries, cities, rivers, lakes and mountains. Map can also be a drawing of the sky showing the position of stars and the planets.

**Types of Maps:** There are many types of maps. Most familiar types are:

- General Reference Maps and
- Thematic Maps

**General Reference Maps:** General reference maps identify and locate a variety of geographic features. Such maps may include land features, boundaries of water, political boundaries, cities and towns, and many other elements.

**Political Maps:** Maps that depict boundaries of countries, states, continents and other political units are called political maps.

**Physical Maps:** Maps that depict the location of physical features of the earth's surface such as mountains, rivers and lakes are called physical maps or terrain maps.

Road Maps, Street Maps and Charts: Some maps are designed to help people to find their way from one place to another. These are maps for travel on land, on water or, in the air. Maps showing different categories of roads, such as motorways, four-lane, or six-lane roads are called road maps, They also show the cities, towns, parks and other places connected by those roads. Street maps are similar to road maps, but a street map shows a much smaller area in much more detail. A map used to navigate a ship or an airplane is called a chart.

People use general reference maps to locate specific places and to observe their location in relation to other places.

**Thematic Maps:** These maps show the distribution of a particular feature such as, population, rainfall or natural resources like coal, petroleum, metals and minerals on the earth. Many thematic maps express quantities by means of symbols or color.

**Atlas:** A book containing collection of maps is called an atlas. A big atlas contains the map of every county.

Globe: It is a map that has been pasted or printed on a hollow sphere. Only a globe can give

correct picture of the earth as a whole, as the surface of the globe is rounded like the earth's surface. A globe represents all parts of the earth's surface correctly. The proportions and positions of the earth's land features and oceans in relation to each other are seen on a globe exactly as they are on the earth.

## **National Maps and Atlases**

The reliability of maps and atlases depend upon the expertise of editorial staff and the cartographers. Most of the countries have their own cartographic survey agencies. In India, we have Survey of India, Dehradun. It is a National Principal Mapping Agency. This organization is responsible for mapping and production of geophysical maps and aeronautical charts.

National Atlas and Thematic Mapping Organization of India (NATMO), Kolkata is involved in the preparation of National Atlas of India, Thematic maps and Digital maps.

**National Atlas of India** in Hindi popularly known as 'Bharat: Rashtriya Atlas; first published in 1957 by NATMO, had 26 multi-colour maps portraying physical and socio-cultural structure of the country. Its revised edition titled 'Bharat: Rashtriya Atlas' has 300-multi-colour plates. It covers all aspects of the land, people and economy of the country. The atlas is being issued in 8 volumes and available for sale. (http://www.natmo.gov.in/)

## **International Maps and Atlases**

The Times Comprehensive Atlas of the World, 13<sup>th</sup> edition published in 2011, is most comprehensive atlas of the world with an index of over 200,000 place names. The Atlas begins with contributions from experts in many geographical fields, providing detailed information on key issues facing the world today such as climate change, environmental threats, global communications, biodiversity and energy resources, with supporting maps, photographs and graphics to illustrate the physical world today and man's interaction with it.

The publisher has published a wide range of atlases. Some of the titles are as follows:

- The Times Concise Atlas of the World;
- The Times Atlas of the World Desktop Edition;
- The Times Atlas of the World Mini Edition

(http://www.timesatlas.com/)

#### **b.** Gazetteers

A gazetteer is a dictionary of geographical names. It lists names of places, seas, mountains and other geographical entities of particular area along with its history, economic development, geography and the people. As a reference source, a gazetteer provides historical, social, cultural, political, industrial, demographic and administrative details of a country, state or a district. Based on their coverage, gazetteer can be categorized into:

- International Gazetteer.
- National Gazetteer; and
- Local Gazetteer.

**International Gazetteer:** Merriam Webster's Geographical Dictionary, 32<sup>nd</sup> edition is an international gazetteer with 54,000 entries, and 250 detailed maps.

**National Gazetteer: Gazetteer of India -The Indian Union**, New Delhi: Publication Division, 1965-78 is in 4 volumes:

- Volume I: Country and People.
- Volume II: History and Culture.
- Volume III: Economic Structure and Activities.
- Volume IV: Administration and Public Affairs.

**District Gazetteer:** Singh, Raghbir & Ranga, Jeet Ram, ed. Haryana District Gazetteer. Chandigargh: Haryana Gazetteer Organization, 1986.

#### c. Guide Books

Guide Books are basically travel guides or tourist guides meant for people who want to visit various places in their own country or any other part of the world. Main purpose of the guide book is to guide the travelers when to visit a particular place, how to reach, where to stay, what to see, and what to buy. The travel guides include information on historical sites, museums, parks, and other places worth visiting in that city or a country. Other aspects covered are information on the routes and travel facilities, best time to visit the place, the types of hotels, restaurants and shopping complexes, etc. Maps, illustrations and distances are also provided to enhance the usefulness of the guide book. In addition, information regarding visa, money exchange, weather, etc. is also given for the benefit of the foreign visitors. Usually a guidebook covers a region, a country or a city.

Tourism Departments of the Governments in most of the countries bring out tourists guides to promote tourism in the country. In India, most of the States (28) and Union Territories (7) have State Tourism Departments, which provide information and bring out tourists guides for the visitors. Ministry of Tourism, India and most of the State Tourism Departments have also launched their websites for the benefit of the visitors. These sites provide up-to-date information to the users. Some of these websites are as follows:

(http://www.incredibleindia.org/ (http://www.delhitourism.nic.in/

Many printed guidebooks are also available for a large number of countries. Among those, Fodor's guides are famous ones. Fodor has brought out 300 travel guides to 7500 destinations of the world.

## 2.1.9 Biographical Information Sources

A biography by definition is an account of a person's life, usually written by someone else and

published or intended to be published. Biographical sources are publications listing biographical details of famous people. Such sources cover biographies of world leaders, people holding key positions in international organizations, people with outstanding performance in sports, music, dance, acting and other professional fields like science & technology, medicine etc. A biographical source may contain a biography of an individual or biographies of group of people (called collective biographies). A book containing collective biographies is also called 'Biographical Dictionary', for example; The Dictionary of International Biography.

The type of information covered in such sources also varies from a brief factual type of data to detailed essay type of biography for each entry. Some biographical sources cover famous people from all walks of life. Such sources are called 'general biographical sources'. In some, the coverage of people is restricted to a single discipline or some other special criteria. Such biographical sources are called subject/special biographical sources. Again, a biographical source may be international or national in scope depending upon the coverage of persons. Some biographical sources cover living persons only, e.g. 'Who's Who', Some cover persons who are no longer living, e.g. 'Who was Who', and some sources cover life sketches of both, living and dead persons, e.g. Webster's Biographical Dictionary.

Some examples of biographical sources:

# **General Biographical Sources - International**

Who's Who in the World 2013, 30<sup>th</sup> edition. Known as Maquis' Who's Who is an American publication providing biographies of the world's most noteworthy people. Information provided in each entry is personal data and career history, education, achievements and membership. The publication is also available online.

(http://www.marquiswhoswho.com/)

# **General Biographical Sources - National**

**India Who's Who, 31st edition**, 2010-2011, published by INFA Publications, contains 5000 concise biographies of prominent Indians from all walks of life including politics, civil service, education, arts, entertainment and sports. Entries are arranged profession wise.

#### Who's Who National Portal of India

The Who's Who section of National Portal of India provides information about persons holding the highest office as well as persons holding respectable positions at executive, judiciary and legislative levels in the country.

(http://www.india.gov.in/my-government/whos-who/)

## 2.1.10 Bibliography

Bibliography is a list of documents that share a common factor that may be a subject, a language, a

period, an author, or some other criteria. Some of the types of bibliography are mentioned below.

- i. A national bibliography lists publications produced in a country. It serves as an effective book selection tool.
- ii. Trade bibliographies are brought out by publishers, booksellers, distributors and printers. These bibliographies list books available for sale. These publications help librarians to select books for the library.
- iii. Subject bibliographies list documents on a particular subject. A well prepared subject bibliography meets the information requirement of a user, who is looking for documents on a particular subject.

# 2.1.11 Indexing and Abstracting Periodicals

Indexing and abstracting periodicals bring together recently published literature in specific subject discipline scattered over wide range of primary sources. These publications, known as secondary periodicals, regularly scan recently published primary sources (primary periodicals, research reports, conference proceedings, dissertations, patents, standards, etc.), select relevant items, arrange them in helpful sequence and bring to the notice of the researchers at regular intervals. Each item is listed with full bibliographical details, with or without abstract. A secondary periodical without abstract, is called an indexing periodical and with abstract, an abstracting periodical. Bibliographical details help the reader to identify an original document. An abstract helps the reader to decide, whether to read original document or not. Sometimes a well prepared abstract, serves as substitute for the original document. Indexing and abstracting periodicals help users to overcome language barrier, keep them abreast of current developments in their subject fields, and solve their research problems, if any.

Indexing and abstracting periodicals are published in almost all subject disciplines and are now available in machine readable form as well. These are available as CD-ROM product or for online searching on the Internet, as bibliographical databases. These databases are either accessible free such as PubMed or are subscription based such as CAS Databases (Chemical Abstracts Service).

## 2.1.12 Databases

Electronic databases are organized collection of data or information that are stored in computer readable form and can be easily accessed, modified and updated. There is wide range of databases; here we will be discussing bibliographic, factual and full text databases. Bibliographic database is a database of bibliographic records. It provides an organized collection of references to published literature, including journal articles, newspaper articles, conference proceedings, reports, government or legal publications, patents, books, etc. A bibliographic database may be general in scope or cover a specific subject discipline. A factual database is a database of complete facts and data, collected from material of a specialized subject area and made available for analysis and application. A full text database or complete text database is a database that contains the complete text of books, dissertations, journals, magazines, newspapers, etc. (http://www.en.wikipedia.org)

Examples of databases:

**MEDLINE** is U.S. Library of Medicine's premier bibliographic database, which contains over 19 million references to journal articles in medicine and allied disciplines. Currently, citations from over 5,600 worldwide journals in 39 languages are covered. The database is updated daily by adding 2000 to 4000 citations every day. PubMed provides free access to MEDLINE and links to full-text articles when possible.

**PubMed** database comprises more than 23 million citations covering biomedical literature from MEDLINE, life sciences journals and online books. Citations may include links to full-text content from Pubmed central and publishers' websites.

(http://www.nlm.nih.gov/) (http://www.ncbl.nlm.nih.gov/pubmed/)

CAS (Chemical Abstracts Service) databases: Some of the databases from CAS are as follows:

**CAplus** is a subscription based bibliographic database from CAS publisher. The database provides abstracts of articles selected from 10,000 journals of chemical sciences and related disciplines and 63 patent authorities. The database has over 38 million records.

**CAS Registry** is a factual database containing chemical substance information, including chemical structure, names, properties, etc: of over 83 million substances.

**CASREACT** is a factual database showing chemical reactions. It covers more than 70.7 million reactions. (http://www.cas.org/)

## 3. Evaluation of Reference Sources

Selection and evaluation of reference sources for a library is an equally important task as of provision of reference service. To handle this task efficiently librarian should have knowledge of library user's requirements, knowledge of reference sources and should know how to evaluate these sources. There are publications which help the librarians to select and evaluate the reference collection for particular library. Publications such as, New Walford's Guide to Reference Resources (2005) and Recommended Reference Books for Small and Medium Sized Libraries and Media Centers (1981), come handy while building reference collection for the library. American Reference Books Annual (ARBA) published by Libraries Unlimited, reviews all new reference works in print, online or on CD-ROM published in United States and Canada during a year. Online version of this publication adds 150 to 200 reviews every month.

The other sources where reviews of new reference works are published are Reference Book Bulletin of Booklist, Library Journal, Choice, and Reference and User Services Quarterly. In addition to the above sources for reviews, lists of recommended reference titles are produced by committees and some publications. RUSA committee brings out a list of "Outstanding Reference Sources" every year and publishes it in May issue of American Libraries. April issue of Library Journal also includes a compiled list of "Best Reference Sources". Web site of Gale publisher also publishes reviews of reference sources under "guest Columnists". (http://www.cengare.com/reference/)

#### 3.1 General Evaluation Criteria

If no published review is available, then general evaluation criteria should be applied while selecting a reference source for the library. This includes checking scope and purpose, authority, currency, arrangement, format, cost the suitability of the reference source for the potential library users.

- i. **Scope and Purpose:** Check the introduction or preface of the book, scope and purpose written by the author is normally available here. This will provide you an idea if this source is useful for your library.
- ii. **Authority:** Then check who are the publishers and author(s) of the source. Reputed publishers of reference works have trained editors and hire services of subject experts for the compilation work.
- iii. **Accuracy and Currency:** Check accuracy and currency of the content. Accuracy of the content can be checked by comparing it with other works on the same topic. Currency can be checked by seeing the copyright date of the source and references cited by the source.
- iv. **Arrangement:** Arrangement of the content should be such that the source is easy to use. Text should be organized with proper headings and subheadings for ease of browsing. It should have good page layout with clear typeface and proper margin, for ease of reading. It should have good table of contents and index with cross-references if required.
- v. **E-version:** When the choice is between print and electronic format of the reference source, then it is advisable to go in for electronic source where the contents are changing too frequently. For example, indexing and abstracting periodicals should be purchased in electronic format. Even electronic format is good choice for the directories, as telephone numbers and addresses keep on changing, and updating is required frequently. The other reference sources, such as geographical sources, biographical sources, handbooks, may be purchased as printed sources.

## 4. Electronic Reference Sources

Most of the reference sources are now available in electronic form. Some of the sources which were available in print form earlier are now available in electronic form only. Most of the material published today exists in computer readable form at some stage of its production process and making it in electronic form is easy.

## **4.1 Advantages of Electronic Reference Sources**

There are many advantages of electronic reference sources than their print counterparts.

- Electronic reference sources are more frequently updated than their print counterparts.
- They provide more search options.
- Provide access to wider range of information.
- Provide faster and easy access to information. This is particularly so in the case of indexing and abstracting periodicals, where back volumes are consolidated into single searchable database, search is easy and extremely fast.
- Online bibliographic databases provide linkages from citations to full text e-journals.
- Full-text data can be delivered instantly on the remote computer.
- Content can be delivered in multimedia format where text, video, and sound can be added.
- A print source can be used by one user at a time, whereas an online 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.

#### 4.2 Limitations of Electronic Reference Sources

- Use of electronic reference sources requires expensive infrastructure, which must be acquired, maintained and upgraded. This covers computer hardware and software, Internet connection and subscription to databases.
- Electronic reference sources, despite being user friendly, require certain degree of computer literacy to get maximum benefit from them. This means libraries have to incur expenses to train their staff as well as their users to use these resources.
- Most of the publishers of e-reference books sell their products through license agreement, which imposes certain restrictions on their usage.
- Reading from computer screen is strenuous. Most of the users prefer to take print out for reading.

Presently, most of the library users prefer to use electronic reference sources, because of the speed of searching, remote access and availability of these resources on the internet on 24/7 basis. Many libraries have a web page showing frequently used online reference works. It is observed that online sources most frequently used by the users are dictionaries (50%), followed by online periodicals, telephone directories and encyclopedias.

(http://www.mhhe.com/katz/)

## 5. Summary

Reference sources provide answers to brief facts, statistical information, background information= or direct the user to additional information sources. Reference collection in a library is extensively used for providing ready reference service to the library users as well as for compiling subject bibliographies and handling specific search or research types of queries. Reference sources include dictionaries, encyclopedias, handbooks, manuals, yearbooks, almanacs, geographical and biographical information sources. Bibliographies, indexing and abstracting periodicals and databases also come in the category of reference sources, as these are used for locating documents on specific subject or topic. In-house tools developed by an individual library such as catalogue,

bibliographies, subject guides can also be categorized as reference sources, as these tools facilitate access to library holdings. To build an appropriate reference collection for a library, the librarian must have knowledge of users' requirements. He/she should know how to use and evaluate the reference sources. General evaluation criteria cover checking scope and purpose, publishing and compiling authority, currency, arrangement, format, cost and suitability of the reference sources for the potential users.

## 6. References

- 1. Cassel, Kay Ann, and Hiremath, Uma. Reference Information Services 21<sup>st</sup> Century: An Introduction. 2<sup>nd</sup> edition. London: Facet Publishing Inc, 2009.
- 2. Katz, A. William. Introduction to Reference Work, Volume 1: Basic information Sources. Volume II: Reference Service and Reference Processes. 8<sup>th</sup> edition. NY: McGraw-Hill Series in Library Education, 2001.
- 3. Katz, Bill, ed. New Technologies and Reference Services. NY: The Haworth Press, Inc. 2000.
- 4. New Walford's Guide to Reference Resources. 3 volumes. London: Facet Publishing, 2005.
- 5. O'Gorman, Jack, ed. Reference Sources for Small and Medium Sized Libraries. IL: American Library Association, 2008.
- 6. Recommended Reference Books for Small and Medium Sized Libraries and Media Centers. Eaglewood, Co: Libraries Unlimited, 1981.