

**I INFORMATION : DEFINITION AND ITS NATURE**  
**II CATEGORIES OF INFORMATION USERS****Structure**

- 5.0 Objective
- 5.1 Introduction
- 5.2 Information
  - 5.2.1 Definition
  - 5.2.2 Nature
- 5.3 Categories of Information Users
  - 5.3.1 Categories
- 5.4 Summary
- 5.5 Glossary
- 5.6 References

**5.0 Objectives**

After reading this lesson the students shall be able to understand :

- (i) The meaning of the word information
- (ii) Shall become aware of the nature of the concept "Information"
- (iii) The library Users and their Categories

**5.1 Introduction**

The first part of the lesson concerns itself with Definition of Information and its nature. There are three kernel terms in this title, namely 'Definition' 'Information' and 'Nature'. Before entering into the explanation as a whole for clarity it is imperative upon our part to clarify the three terms that make up the topic, individually.

- (i) 'By definition', we mean to fix the bounds or limits of something or a concept; to fix the meanings of a term.
- (ii) The Dictionary meanings of the term "Information" are : News, Intelligence Communicated by word or through writing - 'facts' or 'data'; knowledge derived through reading or instructions gathered through any way.
- (iii) "Nature" : It is innate characteristic; essential qualities; vital characters physical character etc.

**5.2. Information****5.2.1 Definition**

Let us consider the following

- (i) News/intelligence communicated by word or in writing, facts or data;

knowledge derived from reading or instructions gathered in any way. (New Webster dictionary of the English language)<sup>1</sup>

- (ii) Knowledge communicated or received concerning a particular fact or circumstances; any knowledge gained through research, instruction (Random House Dictionary of the English language, 1983, p. 730).
- (iii) The definitions of information according to a UNESCO document i.e. Intergovernmental Conference of Scientific and Technological Information for Development, UNISIST II 1979)<sup>2</sup>.

*"Information is made up of symbolic elements, communicating scientific and technical knowledge, irrespective of their nature (numerical textual, graphic, etc.) material carriers (papers print, microform or machine readable form), form of presentation etc. It refers both to substance or contents of documents and to physical existence; the term is also used to designate both, the message (substance and form) and its communication. A distinction is made between raw information (facts, concepts, representation) and the documents in which it is recorded.*

The terms 'news', 'data', and knowledge contained in the above definition of information are relevant for us being relevant to library and information science.

According to **Random House Dictionary** two sets of words are used synonymously with the term information.

- (i) Data, facts, intelligence, advice.
- (ii) Information, knowledge, wisdom

The terms news, data and knowledge are relevant in the context of library and information science accordingly.

- (i) These terms are related to the concept information and thus are nearly synonymous with the term '*information.*'
- (ii) Information is communicated by word (verbal, oral communication) or in writing (e.g. written communication irrespective of the physical form). And information is derived from reading or instructions or gathered in any other way. Further, the last two statements imply that some people communicate information while some others acquire, derive or gather and use information. The former are creators and the latter use (users). The terms actually - news, data, information and knowledge even if used interchangeably are not unanimous - strictly speaking, such impression in through extension of meanings and sometimes are by intention of meanings, they do appear similar.

**(a) News**

The word information is derived from the word 'inform' (verb) and explained in dictionaries as ***"To give knowledge/news/tidings as such it comes to three levels of information i.e. knowledge, news, tidings"***.

These may pertain to contemporary activities, events, personalities - local,

state, national and international. These also pertain to current political affairs, sports and games, economic and commercial activities, painting and music, day to day entertainment and engagements, etc.

**(b) Data and Information**

'Data' is a plural of the Greek word 'datum' (a singular) but it is in modern language constructed as singular, meaning thereby an individual fact, statistic, or a piece of information or a 'group' or body of facts, statistics or the like (**Random House Dictionary**).<sup>1</sup> As such data can be described as discrete and unorganized pieces of information. Data i.e. raw one, becomes 'information' when these pieces are processed, interpreted and presented in an organized/logical form to facilitate a better comprehension of the concerned topic or issue e.g. data for census being collected by the resource persons in accordance with the forms designed by the census authority from the area allotted to the investigators.

On collection of these returns in census office, processing of this data followed by logical, intelligible and relevant description along with collective charts, graphs and comparative approaches, duly to be described on time and any other distinguishing features, becomes information. Similarly Meteorological Department is responsible for the collection of atmospheric data on weather. The data is presented in quantitative (Statistical) form such as tables that contain rainfall, temperature figures over a period relating to different regions.

On the other hand Air port authority and their pilots need weather data relating to the region through which their Air crafts would fly. The brief note on the weather based on these tables would tell the pilot whether he would face any air turbulence on the route. This processed data with useful interpretation then becomes information. As such we can say "Processed data" that tells the targeted audience is called information.

To clarify further, **Reserve Bank of India** from time to time issues/publishes notifications on exchange control regulations as and when some existing regulations are amended or new ones introduced. They do not follow any logical sequence. We can term the contents of a circular as discrete pieces of facts. However, if these notifications at a later stage and time, are organized or integrated in such a manner that all the related pieces are brought together in the form of 'relating to foreign exchange regulation; relating to business travel', etc. It becomes information, So we can say "processed, organized as well as integrated data becomes information."

A scientist, studying the behaviour of a chemical compound under different physical conditions would observe and record the relevant data as provided by the experiments. This new data of facts is unable to convey any meanings unless the scientist filters, analyses and integrates them and finally interprets his

findings. The resultant product is then information.

Thus we can define information either as a report on contemporary activities, events, personalities-local, state, national and international pertaining to current political affairs, sports and games, economic and commercial activities, painting and music, day to day entertainment and engagements etc. also goes under the heading news; or a brief note on the weather conditions on the basis of processed and interpreted data of **Meteorological Department**; or an organized as well as integrated; occasional notifications issued by **Reserve Bank of India** from time to time putting related pieces of data altogether; or finally reported findings of a scientist based upon filtering, analysis and integration of the data collected through experiments conducted under different physical conditions upon chemical, physical, animal or human agents. Thus, it is news, it is brief note; it is integrated and organized pieces of data and; reported findings of a scientist. Even if we consider knowledge, wisdom and information as synonymous, but the following quotation suggests that it may be similar, it can not be the same as apparent from the following quotation.

***"Where is wisdom, it is lost in knowledge. Where is knowledge, it is lost in information"***. The first couplet reads as that knowledge is wisdom when infiltrated and gets new form. Similarly knowledge in case refined and integrated for communication, it becomes information.

Information, in one form or another, has consistently been a significant element in the development of human society, that it has shaped over a long period of time, the way in which we think and act. In modern times, information has become an ingredient of man's life-cycle meaning thereby there is no life in the modern society without information. Information enables man to perform his day-to-day duties. Information is a resource of immense economic and social value. It is vital for proper functioning of a democratic society, a crucial toll in a productive economy and an effective government, a central part of the growth and well being of individuals. The ability of man in thinking and decision-making has given him the power to rule the universe. The power lies in gathering and addressing the relevant information relating to a particular problem. For taking a decision he has to gather the information from several sources in the course of which he puts forth his energy in the form of efforts to locate the sources and investing money for the same. Information relating to trade and stock market industries, research, management of offices and homes etc., is required in the course of decision-making. As such information has become an indispensable resource to the individual. Information is required at personal level and societal level for the development and management of things.

Let us consider the definition of information viewed by various philosophers, wherein information is related to process. knowledge and

communication.

Information and Process: *"Information is the product of the human brain in action and may be abstract or concrete, for example, love, fear, book, pen. When an individual begins to think, a variety of images and sensations flash through his mind."*<sup>5</sup> (C.G. Vishwanathan) Drucker compares information to electricity and expresses : Information, like electricity, is a form of energy, information is energy for mind work.

**McDough** states that, *"Information is the measure of the net value obtained from the process of matching the elements of a present problem with appropriate elements of data. He further adds that "information is a process which occurs within a human mind when a problem and data useful for its solution are brought into productive union"*.<sup>6</sup> This indicates that information is the product of human thinking caused when the problems are solve using the related data. Information is the result of data, usually formalized in processing which shows the relation between thinking and processing of data supplied. According to Shera<sup>7</sup>, information is a 'fact'. It is the stimulus which we perceive through our senses. This information may be a single isolated fact or it may be a whole cluster of facts; but still it is a unit, it is unit of thought. It can have any dimensions. It is that intellectual entity which we receive, the building block of knowledge. Information is news, facts, statistics, reports, legislation, tax codes, judicial decisions, resolutions and the like **Whitemore** and **yavits**<sup>8</sup> views the term information as "data of value to decision making. Davis<sup>9</sup> has defined information as *"data that has been processed into a form that is meaningful to the recipient, and is of real perceived value in current or perspective decision.*

The factual data, ideas, and other knowledge from any segment of society that are identified as being of value, sometimes gathered on regular basis, organized in some fashion, transmitted to others, and used in some meaningful fashion.

Information and knowledge: Before we sum up the definition of information, we must distinguish in between knowledge and information. Knowledge is related with information as Gangotri is related to the Ganges. Information is the product, it is measure of value, it is a process which occurs in the human mind as and when data is confronted with a problem for a logical solution - data usually formalized for decision making or the concept with value added leading to communication. Kent<sup>10</sup> feels information as the feed stock for knowledge; information is of the value of being possessed by individuals. Further, knowledge is a sum of many bits of information. Further with an information added to the existing body of knowledge  $k(s)$ , it results are modified i.e.  $k(s+s) / K(s)+1=k(s+s)$ .

**Machlup and Mansfield**<sup>11</sup> differentiate information from knowledge as (i)

information is piecemeal, fragmented and particular where as knowledge is structural coherent and universal (ii) information is timely, transitory, at times ephemeral whereas knowledge is of enduring significance; and (iii) Information is flow of message, whereas knowledge is a stock largely resulting from the flow. Information affects knowledge by adding to it, restructuring it or changing it in any way.

Information and Communication : Communication between individuals or a group, between groups, is viewed as information. **Webster's International Dictionary**,<sup>12</sup> defines information as, "*the communication or reception of knowledge or intelligence, something obtained or received through informing; the process by which the form of an object of knowledge is impressed upon the apprehending mind so as to bring about the status of knowing.* **Oxford English Dictionary** takes information as a verb (gerund) and construes the meanings as : i) Communication of instructive knowledge (ii) Communication of knowledge or news of some fact or occurrence, and (iii) Knowledge communicated concerning some particular fact, subject or event. Buckland analyses the three meanings of information given in Oxford English Dictionary.

Information-as-process is (a) the act of informing i.e. communication of knowledge or news of some fact or occurrence, (b) information as knowledge : meaning thereby - to denote that which is perceived i.e. information as a process. The knowledge communicated concerning some particular fact subject or event, that of which one is apprised or told, intelligence, (c) Information as thing : the term used for objects, such as data and documents, that are referred to as 'information' being informative - having quality of imparting knowledge.

In short, 'information' is the knowledge put to use, that may bring in good or bad results. The value of information is in the hands of the manager, or scientist, or any person concerned with decision making, to use the information on hand in a prospective way. No decision is taken in the midst of uncertain options. Here, it is the information that helps the decision-maker arrive at a decision by reducing the uncertainty. There is relation in between the quantity of information, place, the speed with which the decision is to be taken and the person who takes the decision.

The following example may make the ideas, a little more clear

- (i) Data = Cotton, information = Yarn and the knowledge is Cloth,
- (ii) Data = Sheep hair, information = Wool and knowledge is Showl,
- (iii) Data = Polythene, information = Poly yarn knwoledge is poly cloth.

Cotton, sheep hair, polythene can be loomed into yarn, wool or poly thread that can be weaved into cloth, shawl and polythene cloth. In general, both data and information are the building blocks of knowledge - which is handled and

served in libraries offering different types of services, appropriate in each case.

### **5.2.2 Nature of Information**

(i) Information is a social wealth that helps individual and groups in society that dedicate themselves to research, development and other types of creative and innovative work, collect and assemble data and generate information and knowledge. This is intellectual property of the individuals and groups who create them. This is such a knowledge that helps in generation of economic activities. Information is in a process of growth in every society since time immemorial. The knowledge stream is continuous, gets every moment augmented as well as upgraded by modifications. Thus, information by nature is continuous, cumulative, dynamic and ever-growing. The curiosity is continuous and no final judgement can be passed upon its evergrowing aspects. Another nature of information is to make it prone to continuous validity of application, it has to be upgraded before diffusion and dissemination. This process continues the path of qualitative and quantitative augmentation of information. Necessity is the mother of invention. To meet the dynamic nature of information, there is an explosive development in the information technology during the period of last fifty years to meet the challenges of information. It is due to this that dynamic information - its growth - qualitative and quantitative can be controlled, processed and harnessed for the betterment of the society both at national as well as global level. Information is an agent of change in the 21st century. It helps in generation of wealth in the form of educational institutions, research establishments, scientific and technical centres and other similar institutions that are knowledge oriented. Information and knowledge as they grow, invite criticism, dialogue and commentary that adds value to them. Information is a resource for development and as such it will give rise to new power structure i.e. information rich and information poor among nations. Within a nation information by its nature is expected to encourage rich articulate and participative social system with decentralized as well as centralized decision making organizations. Information adds up increasingly rewarding, qualified creative and formative work and eliminate repetitive activities. Information as communication can bring in an era of better man-machine relationship by using increased capacities for interaction, dialogue, adaptation and through intelligence lower the part of machine, it can eliminate machine domination over man. Information can add a role of workers in direct management.

- (i) Information is shareable, not exchangeable, can be given away and retained at the same time.
- (ii) Information is expandable and increases with use.
- (iii) Information is compressible, can be compressed, integrated etc.

- (iv) Information is acquired at definite measurable cost.
- (v) Information possesses definite value depending upon its user which may be quantified and treated as an accountable asset.
- (vi) Information varies in value over time in an unpredictable field.
- (vii) Information has a consumption rate which can be quantified.
- (viii) Information is amenable to the principle of cost-accounting.
- (ix) Information is a source of both political and economic power.

### **5.3.1 Categories of Users of Information**

It is difficult to identify mutually exclusive categories of users of libraries and information centres. However, it is possible to indicate broadly the major categories of users of libraries and information centres. These, in general, constitute the following:

- (i) Student (all levels - school, college and university);
- (ii) Teachers (All levels, school, college and university);
- (iii) Authors and writers;
- (iv) Researchers (Formal and informal);
- (v) Planners and policy makers;
- (vi) Business managers and Executives;
- (vii) Entrepreneurs and Industrialists;
- (viii) Bureaucrats, and
- (ix) General public

The demand for information for each category may differ from each other in accordance with their specific requirements.

Students require mostly text books, occasionally primary literature-journals, conference proceedings etc., general books and recreational books i.e. fiction, travelogues, biographies etc. writers and scholars visit information centres for primary literature, reference books, bibliographies, government documents. Research scholars and technical staff require - monographs, treatises, primary literature, reference books, bibliographies, theses, patents, standards and specifications. Field engineers and Medical specialist etc. need management information, patents and standards manuals and special hand books. Regarding Business managers and Executives occasionally primary literature, reference books, government documents. Industrial entrepreneurs require primary literature, reference books, bibliographies, government documents, patents and standards, manuals, handbooks, trade literature and general books. Bureaucrats require occasionally primary literature, government documents, management information and general books. Librarians and information specialists make use of primary literature, reference material Bibliographies, Current Awareness bulletins, Indexing and Abstracting tools, reviews, Progresses, Addresses, state of the Art Reports Government Documents that include commission/committee Reports,

Regulatory literature, etc, patents, standards, specification; manuals and special handbooks, trade literature including market information; general books to guide the different categories of users. General public uses primary literature consisting of journals, conference proceedings etc. reference books, general books as well as readings for recreation.

It has been observed that libraries and their stock of documents and the information these documents carry are all for intensive use. Students, teachers, researchers, students, engineers and technologists, technicians, planners and policy makers, bureaucrats and the general public could greatly benefit and increase their efficiency and effectiveness in many areas of their endeavours and make a positive contribution to socio-economic development, if only they know how to collect and use information. Experience has shown that our libraries and information centres in India are very much unused and underused this is, largely because most of the users are generally unaware either of the collection of documents as well as the libraries and information centres as to what services these can provide to them. It is, therefore, considered essential to build skills in users for making full use of libraries and information centres being provided to them in a democratic system. These are for them, being provided by democratic system for them and run with public funds so that they better conscious and responsible units of the progressive programmes. It is possible initially that they be brought through some advertising as well as public relation techniques. Once they come to the library, they must be made independent for self-help through some instructional programmes. Added to this, there is also an increase in the use of technological gadgets for house keeping operations in libraries and information centres for providing access to information and obtaining hard copies of documents. Day to day computer terminals are increasingly being provided to users of libraries and information centres through which users can access information. They are as such to be made familiar with the use of computer terminals. Therefore, libraries are being asked to conduct short courses in the use of the libraries and information sources. These courses are grouped as :-

- (i) Use Orientation;
- (ii) Bibliographical Instruction; and
- (iii) Training in the use of modern technological gadgets.

Another category of users can be pointed out where in bibliographical instructions can receive importance i.e. that of research students requiring initially to collect information concerning their research work and how to access it. Another category that gets attention concerning Bibliography instruction is project workers - middle level officers who have the responsibility of collecting information. These instruction can have the frame work of a training programme for the target category of users, duration of such course duly decided with

deliberations of requisite course contents i.e. (i) information sources (a) documentary sources - primary, secondary and tertiary (b) multi-media such as microforms, machine readable forms etc. institutional and individual expertise to apply in instructional methodology - use of audiovisual aids, lectures, demonstrations etc., added with mimeographed course material, strengthened with tours of libraries, practical and self-learning course. However, for each category of users there must be feedback and evaluation effort to add further to upgrade the programme both quantitatively and qualitatively. The effort will be subject specialization based categories of libraries and information users.

In the New Information Technology Era the users have been categorized on the basis of quantity as well as quality of Information Technology and within them the levels of students and researchers, sub-categories to be recognized on the basis of different aspects that need attention, those are :-

- (a) The mechanism to access requisite target information by the target users category through training for self-help.
- (b) Online access to foreign (international) data bases through formulation of queries and search strategies and
- (c) Knowledge of foreign databases in different subjects and information relating to business, industry, government affairs etc.

The users - categories can be arrived at, on the basis of the types of libraries and information centres. For example National library, Academic libraries - school, college, university libraries user group, special libraries users groups, agricultural libraries and information centres, documentation centres attached to national centres such as **Indian National Scientific Documentation Centre (INSDOC)**, **Defence Science Documentation Centre (DESIDOC)** etc., Public Libraries users groups men, women, all sectors of population - Labour, Industrialists, Businessmen, Men of politics, Service people, Children, Educated, Illiterates etc. again divided by population cluster village, subdivision, Division, Urban city headquarters, other cities, state headquarters, National Capital, Metropolitan cities etc.

These user's groups are identified to know as to who is eligible to use a particular library or information centres i.e. interaction of target users with target information sources, in multimedial forms and also a few basic services to the entire population for making them alive to their obligation and rights in a democratic structure, where every member is vital in the act of nation-building? For such a structure, question are: what services are to be provided and how? what inputs are essential for minimum services to start with? and how to upgrade requisite infrastructure by and by? Any organization requires the following constituents for efficient working in the service of users groups attached to them. Those are: clearly defined objectives along with legal base,

stock or material stock-vehicles of knowledge - such as Books, scientific and general as well as academic periodicals, alongwith a sufficient intake of indexing and abstracting periodicals, bibliographies - general as well as subject, sufficiently representative reference tools with continuous updating. For rationale use of sources inter libraries and information centeres engage in cooperation programmer to avoid duplication and wastage of monetary resources and finally use of New Information Technology gadgets. Also staff savings from repetitive work for vital information through elite staff for elite staff for elite users' groups. The list can be featured to reflect the areas of interest or product profile of the organization. The list can include information for more than one type of information source. Research-in-progress Bulletin is the kind of current awareness service, and as the name suggests it allerts user to new research projects and progress made in ongoing research project. Such a current awareness service for users require the joint effort of more than one organization working in similar or closely related research area. Such a service can be provided by Council of Scientific and Industrial Research (CSIR), Indian Council of Agricultural Research (ICAR) in india. CARIS (Current Agricultural Research Information System) of FAO (Food and Agricultural Organization) is an international service that reports Agricultural Research. Similarly (CRIS), a computer-based information service is being circulated by United States Department of Agriculture (USDA). Such information includes information about the laboratory at which project, and special equipmens is in use, if any. In addition it includes a narrative description of the research project along with progress achieved till date. The research-in-progress databases in computer readable from like CRIS of USDA. Such a database can be used both for retrospective search as well as for current awareness service.

**News papers clippings service** based on current awareness media is another one since they publish news of recent happenings on the political, social and economic front of a nation or region. Newspapers carry useful information to everyone from housewives to top management of companies and cabinet ministers. Again, newspapers are of different kinds. Some of them are local or regional in their orientation and coverage, others are national or international. Further some Newspapers specialize in economic or financial news and contain in depth analysis of industry, trade, banking, commerce, etc. Given the aboye characteristics of newspapers, it is not surprising that they are considered as valuable sources of information. Libraries and documentation centres have attempted to provide information services based on newspapers. Once such service is the **Newspaper Clipping Service**. In the Newspaper Clippings Service, a library subscribes to one or more daily or weekly newspapers, carefully chosen for their coverage of areas of interest to

the organization of which the library is a part. Each of the newspaper is scanned and any items of news that are considered to be of interest to the user group are clipped (i.e. cut) and pasted on a sheet of thicker paper or card. The clipping is then assigned one or more subject headings or group/class codes. At periodic intervals (e.g.daily, weekly) the clippings are arranged by subject headings or group code and disseminated to users. In a small organization batches of clippings themselves in one or more groups may be circulated to users. In larger organizations, where the circulation is wide, a bulletin containing the news items with or without annotation may be circulated. The clippings themselves are filed in vertical or suspension file folders for possible use at a later date. These clippings which are considered to be of very little use are discarded. Newspaper clipping services are quite common in libraries of government departments, banks and financial organization and industrial development agencies. The incidence of such services in scientific Research and Development Organizations organizations is considerably less.

#### **5.4. SUMMARY**

Information is the knowledge put to use, which may produce good or bad results. The value of information is in the hands of the manager of the scientist, or any person concerned with information as a user or provider. No decision is generally taken in the midst of uncertain opinions. Here is the information that helps the decision maker arrive at a decision by reducing the uncertainty. The degree of uncertainty, however, varies from person to person as such from one category of users to another category of user depending upon level, place and time. This strikes the relation between quantity and quality of information, place, the speed with which the decision is desired to be taken and the person who is decision making authority.

#### **5.5 GLOSSARY**

Explosion of Information	:	Growth of Information beyond a manageable limit
Exponential Growth	:	Quantitative growth of a thing at a particular rate of growth e.g. Chemical Literature Doubles every Seven Years.
Futurologist	:	Specialists in Social Forecasting
Information Age	:	A Period Predominately Centered on information activities.
Information Society	:	A Society in which activities are centered on Information
Literatures	:	Writers of Literary Works

**5.6 REFERENCES**

1. *New Webster Dictionary of the English Language*, 1984, p. 494.
2. Girija Kumar, IASLIC Conference on Information Management. (Kurukshetra, 1991). Keynote Address.
3. Vishwanathan, C.G. *Elements of Information Science. Today and Tomorrow*. New Delhi, 1976, p. 2.
4. Kent, K. Information as Power. *ASLIB Proceedings*, 31.1.1979, p. 16.
5. Machlup, Fand U. Mansfield, *Study of Information Interdisciplinary Message*, New York : Wiley, 1983, p. 743.
6. P.S.G. Kumar : *Library & Users : Theory & Practice* : Delhi. B.R. Pub.2004.

**I. INFORMATION NEEDS OF USERS  
II. INFORMATION SEEKING BEHAVIOUR**

**Structure**

- 6.0 Objectives
- 6.1 Introduction
- 6.2 Information Needs of Users
  - 6.2.1 Education and Research Based Group
  - 6.2.2 Professionals
  - 6.2.3 Government Officials and Bureaucrats
  - 6.2.4 Information Growth
    - 6.2.4.1 Primary Documents
    - 6.2.4.2 Secondary Documents
    - 6.2.4.3 Tertiary Documents
  - 6.2.5 Information Demands of Users
  - 6.2.6 Information Service Agencies
- 6.3 Information Seeking Behaviour
  - 6.3.1 Objectives
  - 6.3.2 Findings : First Study
  - 6.3.3 Findings : Second Study
  - 6.3.4 Findings : Third Study
- 6.4 Information Seeking Approach of Users
  - 6.4.1 Current Awareness Services and thier types
  - 6.4.2 Contents by Journals
  - 6.4.3 Documentation Bulletins/Current Awareness Lists
  - 6.4.4 Research in Progress
  - 6.4.5 Newspaper Clipping
- 6.5 Summary
- 6.6 Glossary
- 6.7 Further Readings

**6.0 Objectives :-**

An investigation into attitudes of the users of the library and information center towards information use world reveal how for the users are psychologically favourable to the process of information source use. An attitude is a predisposition or readiness toward, a certain course of action, examination of various factors including personal and psychological attributes, knowig about users in a library is as important as knowing about a consumer in bussiness. In the present lesson,

we shall discuss about the information needs of the users and their seeking behaviour is a ladder to know the important needs of the users.

The objectives of the lesson are fixed as under. After the study of the lesson, the students will be able to understand :

- (i) Information needs of different users ;
- (ii) How they behave ( motor or mental) while seeking information in library and information centers.

### **6.1 Introduction**

This lesson has two parts : (i) Information Needs of Users and (ii) Information seeking Behaviour. User here is a person who visits the library and information centre:

- (i) To browse through a collection of library resources being stored and preserved to meet his/her needs;
- (ii) to consult a particular document or to borrow it for home study;
- (iii) to obtain current reference on a specific topic of his/her interest or a bibliography of references;
- (iv) to obtain factual information on a topic, event, activity etc., through reference sources;
- (v) to obtain a photocopy of a journal article, a conference paper or a technical report; and
- (vi) to get a translation of a research paper in English of any non English language.

There are a number of categories of these users and to meet their needs a variety of documents in multi-media physical forms are available in present day libraries. Here we are to study their attitude towards library services designed to meet their needs, in other words to study their information seeking behaviour to strengthen our resources and services as the libraries and information centres are for user.

### **6.2 Information Needs of Users**

Everybody needs information for some purpose or the other. When you want to travel, you need information about routes, timings of the transport services, hotel facilities and the like. You may gather this information from a friend or from a travel agency. You may go to a public library of the area and collect this information from some documents like tourist guides, railway time tables. The discussion in this section would be limited to information which is recorded in various types of documents or online information. There are a variety of reasons why people seek information. There is a variety of cross sections of people in society i.e. users having information needs. They can be grouped into a few need based sections.

#### **6.2.1 Education and Research Based Users Group**

- (i) Students need information relating to prescribed syllabus for pursuing

academic studies to pass or to excel in examinations.

- (ii) Teachers need information to impart timely and relevant instructions upon the subjects allotted to them to teach.
- (iii) Research scholars - scientists, social scientists, literature and humanities specialists, etc., need information on a continuing basis and are considered the biggest consumers of information.

It is indicated that the researchers are the biggest sector of consumers of information. While the information needs of all types of users are important in varying degrees, the researchers have unique information needs which distinguish them from other user groups. Most of the information systems and services have been developed to satisfy these requirements. The output of research constitutes a major part of information handled by the library and information services. Thus researchers are both consumers (i.e. users) and producers (generators or creators) of great distinction of information. Keeping this in view therefore, hereafter detailed discussion shall be regarding their needs for information.

The three purposes for which researcher needs information are :

- (i) To keep abreast of developments in an area of his/her research;
- (ii) To get acquainted with the state of art of the specialization;
- (iii) To gather specific relevant data and information at different stages of his research work;
- (iv) To know the current developments is the basic objective and factor for success in the career of a researcher. This activity not only updates his knowledge stimulates his thought process and often suggests new ideas, experiments and horizons. For research initiation, one has to undertake a thorough literature search i.e. examines various documents containing information on the topic. The work is taken up as a step for literature survey an essential chapter to link the context with the topic. He examines various primary and secondary documents containing information on the topic;
- (v) To get acquainted with the state of knowledge in the area;
- (vi) To identify gaps and shortcomings in the existing knowledge and thus to assess further scope of work in the area; and
- (vii) To diminish the probability of duplication of work and thus to save time, effort and money and also to avoid frustration to the researcher.

Thus, research is essentially and primarily information oriented activity.

### **6.2.2 Professionals**

Professionals like medical practitioners belonging to all systems of medicine-Allopathic, Yunani, Ayurvedic and Homeopathic, legal practitioners, need latest information to pursue their professions successfully. No professional can afford to sleep over new developments in his/her profession. Their ignorance

shall be fatal to their patients as well as clients. Judges need access to earlier verdicts as well as case precedents before pronouncing judgements. Similarly Engineers and Technologists also need information for solving technical snag faced by them, on the shop floor, under construction of a bridge, or a road in a hilly track. Another category of professional is the managers (executive) of business as well as industrial organizations need requisite information to enable them to take appropriate decision relating to issues having both shortcomings and long term implications. They need more information for taking decisions involving managerial issues.

### **6.2.3 Government Officials and Bureaucrats**

Government officials who are in public administration group (who are being termed as managers in our democratic structure) seek information for decision-making, legislators also need information for arguing a point on the floor of State Assembly, Central Government level as members of Lok Sabha and Rajya Sabha. Thus, the discussion above shows that information is a vital input to different types of activities performed by different categories of people.

There are reasons why libraries and information centres should provide information services to users. The proliferation of primary literature, enormous increase in subject specialization and their multi-disciplinary nature demand increasing need for quick access to information. While information grows exponentially, the time available at the disposal of users - researchers, professionals and government officials remains almost the same. As such they can not scan even a small fraction of the available literature in their own areas of specialization.

### **6.2.4 Information growth**

The first factor that points towards the phrase "Information Explosion or exponential growth of Information" in turn calls for the use of computers for handling this large mass of information. We talk about 'growth' rather 'explosion' because we see around us, in large book shops and libraries, also in news stands, a wide array of documents - books, periodicals, news papers, news magazines that contain recorded information. Primary information is made available in primary document for dissemination.

#### **6.2.4.1 Primary Documents :**

These are the journals that contain timely information in them. Since the first ever journal of the Philosophical Transaction of the Royal Society in 1665 - the journals have been the most efficient, flexible and effective mode of communication of results of current research. Therefore, these are the most important source of primary information for needed by the research community. This explains the proliferation of new titles. The other two reasons that make them important for research community are (i) they formalize the results of research by making them available to researchers in related fields for critical

comments and (ii) publication of papers in well known journals enhance the prestige of researchers and brings them recognition.

During the last several decades professional Associations, academic and research institutes and the publishing industry (private, corporate or government) have actively been engaged in its growth further. These developments are posing new challenges to the libraries and information centers for the acquisition, processing and storing of these for the uses of their consumers. Every five years, it has been estimated now-a-days that the becoming number of journals gets doubled but even then the demand of the users are also more voluminous as compared to existing journals. Further no library individually can accommodate new titles within their limited budgets. The subscription rates of newly introduced journals of private publishers as well as those of the institution journals are steadily increasing. The researchers find it difficult to gather material on a specific subject scattered in a large number of journals. In view of this, the secondary and tertiary sources assume great importance for researchers. In spite of the enormous increase in the number of the titles of journals, there is still considerable time lag between the receipt of papers and their publication. This urge for quicker dissemination has resulted in the introduction of two other types of primary documents : that are :

- (i) Letter journals; and
- (ii) Working discussion papers.

Where as the first type publishes "letter to the editor" also know as "short communications" instead of full length/papers containing the preliminary finding of research. Working discussion papers are termed as Informal Unpublished Papers. These are also known as primary communications.

(iii) Reports : Reports literature as well as research reports are another type of documents that are termed as primary documents that researchers ask for. A report is a document that carries the results/or the progress/or an account of the first stage of experiment of a study or research or development or an investigation. A large number of report literature is issued in a mimeographed form which may or may not be published later in a journal. These are made available to researchers usually through different secondary sources. These usually appear in unpublished form. A few administrative report are produced due to administrative reasons.

#### **6.2.4.2 Secondary Documents :**

- (i) **Bibliographical Type** : To help researchers to access relevant material having bearing upon their specific subjects of interest;
- (ii) **Survey Type** : Review and Treatises and monographs. A review is a survey of literature of the primary literature in a specific subject field covering specific period and ideally accumulates, digests and correlates the relevant current literature and indicates the current development and future

directions. A critical or evaluative review done by a specialist often highlights gaps in the research field and suggests new avenues for research. Reviews appear under such titles as Advances in ..... progress in ..... Annual Review of..... In specific subject fields. These can be quarterly or monthly review/journals also as well. In information fields of science, indexing and abstracting services in a published form are considered among secondary sources. Treatises are another survey type secondary source.

#### **6.2.4.3 Tertiary Documents**

These types of documents are usually compilations drawn from primary and secondary sources organised and arranged according to a definite plan. Essentially these are to avoid researchers in using primary and secondary sources. Their examples are - **bibliography of bibliographies; guides to literature, directories and textbooks. Bibliographies and citations are appended to research paper in journals, research documents, monographs and treatises** and such other primary documents. In order to avoid their total loss, these lists are collected and completed on the basis of references in some primary and secondary sources such as reviews or state of art report under the heading bibliography of bibliographies, since pioneering work of Theodore Besterman Since 1939 "A world bibliography of Bibliographies" is an other example of such a work . It is bibliographic index that lists bibliographies published in current primary sources. Literature guides are a specific type of reference tool designed to help researchers in finding important types of information sources in specific subject field. Butterworth and company has published guides for the subjects of Chemistry, Biology, Engineering, Medicine, Economics etc., constantly updated giving the latest references. Using these guides one can locate a specific source of information or can identify a source of information or can undertake current or retrospective literature search. Thus, these contain description of the nature of literature, giving an account of important and standard books available in the subject field alongwith bibliographical coverage of different subject fields. Directories are the sources of information's generation as they contain lists of organizations and institutions and gives comments upon their functions and activities. These are directories of learned societies and institutions, research institutions, periodicals and serials, products and processes. Ulrich Directory of Serials and World of Learning by Europa Publications are very good examples of continued updated sources.

Text books is a standard work used for instruction which is arranged in such a manner that it helps in the understanding of a specific branch of knowledge. It is, however, not intended as a source of information but is often found useful in getting a systematic overview of a topic. These have levels. Keeping in view the targeted users and level there are termed as introductory or elementary or advanced. The last level possesses the characteristic of treatises

and monographs text-books. In short, assimilated information is written for a particular level of audience. These are used as hand books by teachers and students. Textbooks are never an original document as these do not give any new or original information. These basically include collected information and data, already available, but presented to suit a particular requirement. These cannot be used as conventional reference source, although they may serve a reference purpose.

#### **6.2.5 Information Demands of Users**

Information services are needed by users not only on demand during the information but also in anticipation. Often it is necessary to repackage the information contents from various sources to suit the requirements of the users of a specific category. These may, further be needed in a language not of the document but in the language intelligible to the users. Further, the users may demand full text of the document also.

#### **6.2.6 Information Service Agencies**

Information transmission chain includes in the first instance, the libraries as traditional link with services like initiation of new-user into the library activities followed by **Current Awareness Services, Selective Dissemination of Information Services, Indexing and Abstracting Services, Literature Searching and Reference Service**. The new documentation institutions are providing to researchers alongwith indexing and abstracting services, literature search, Translation Service, Document Delivery Service and Reprography Service with the help of new information technology. The first four services are basically bibliographical services which guide the users to documents where in the requisite information is likely to be made available. These services can be grouped into current information services and Retrospective information services. First two fall in the first category rest deals with the second category. The most vital link of this processing link is the primary journals. They are responsible for the dissemination of the output of research providing him link with the fellow researchers. The indexing and abstracting publications belong to the chain providing accelerating transmission of information to users - linking primary sources to users. Facilitating centres are traditional libraries and with a passage of time new facilitating public and private specialized service institutions have also entered, that are:

- (i) Documentation and Information Centres; and
- (ii) Online database services information Analyst Centres, Referral centers.

### **6.3 Information Seeking Behaviour**

We have so far been engaged with studying the user needs and also the sources to satisfy these needs through varied types of sources and information services with reference to research and development in universities and industrial research units. Now we will attempt a study of the methods applied in the study of

the users needs conducted in the context of R&D. These methods are broadly divided into two categories, namely, direct and others including indirect methods. The direct methods have emerged in recent decades to supplement the data acquired by indirect methods, that is to analyse library records, to obtain data on the use of materials and user categories. Direct methods can be broadly studied under the following headings :

- (i) Information gathering habits/Information Seeking Behaviour;
- (ii) Reading Habits;
- (iii) Service Preferences; and
- (iv) Flow of Information.

**6.3.1 Information Seeking Behaviour demands :** The inclusion of the factors (i) information Gathering as well as reading habits (ii) service preference and (iii) finally flow of information to and from users.

Information gathering habits usually have been studied in the context of research and development so far. It has been observed that researchers gather information in a number of ways such as:

- (i) browsing current journals and also noting the latest references to research papers;
- (ii) consulting abstracting and indexing periodicals;
- (iii) contacting and obtaining information from persons in the same field;
- (iv) seeking information from tutors, guides and senior co-workers; and
- (v) writing to information supply centres and so on.

The main objective of such a study has been;

- (a) An effort to find how a user obtains his information
- (b) To study the researcher's dependence on libraries, technical staff in the library and on the main journals through which the research obtains the information; and
- (c) These studies have enabled the library and information professionals to know the general behaviour of the researchers in obtaining information, which in turn help them to organize their acquisition programmes oriented towards actual requirements of sources and generate appropriate services. Another information use pattern of social scientists made through direct method avelper in a University Environment could provide the following results based upon critical analysis of data :-

### **6.3.2 Findings : First Study**

The important findings of the study are :

- (i) On an average the social scientists spend time on reading than for searching of information, teaching and research;
- (ii) mostly their information behaviour was diverted towards socio-economic information;
- (iii) for current awareness, the social scientists scan current issues of journals;

- (iv) most frequently used sources of information were primary books and periodicals;
- (v) self-use of primary and secondary journals was very poor; and
- (vi) overall picture reflected that there was an urgent need to educate the users (social scientist) in the use of the library.

### 6.3.3 Second Study

Another direct method to arrive at the real picture of information seeking behaviour or researchers in **botany** has been done on the basis of the analysis of the citation study that points towards:

- (i) Use of Information sources : their subjects, country and language.
- (ii) Core list of journals quoted by the maximum researchers in their research papers.
- (iii) Shows the level of obsolescence of relevant literature.

### 6.3.4 Findings : Third Study

An example that critically examined is "Information Seeking Behaviour of Engineers in a Library of a Fabricating Industry", the findings are :-

- (i) The maximum number of users (Engineering Graduates) were working in the designing area;
- (ii) The number of users visiting library daily was low;
- (iii) The users were depending more on books than upon journals. The acquisition of technical books needed immediate attention;
- (iv) The selection of core journals is must and unused material be discontinued for intake;
- (v) There is need to provide SDI i.e. compilation of bibliographies; and
- (vi) Computer application and Interest service of LAN and WAN are the prerequisites to improve the users 'Information Seeking Behaviour'.

Modern Libraries and Information Centres offer a variety of new documentation service to provide support to Research and Development, industrial productivity management, marketing and trade, all programmes of development of governments and institutions etc. There had been an enormous increase in the quantity and variety of public actions coming out from all corners of the world in many a languages and forms that carry results of current research, industrial and technical advances, economic developments etc. This proliferation of publications has posed serious problems for those involved in these activities, to keep themselves abreast of current development. It has, therefore, become necessary for libraries and documentation information centres to design and develop new and innovative information services to strengthen information seeking behaviour of their users. Two such services are : current awareness Services and Slective Dissemination of information. Four types of CAS are (i) Content by Journal (ii) Documentation Bulletin (iii) Research-in-Progress Bulletin and (iv) News paper clippings. Selective Dissemination of Infromation is

user-oriented. The components of SDI are : a database of documents, a set of user's profiles, a mechanism to match document profile with user's profiles, user SDI interface and communication. The functional phases of SDI include : selection databases, preparation of user profiles, notification to participants, feedback and modifications to tune the system to obtain best results with the advent of the computers and communication facilities SDI can be provided centrally through LAN, WAN and by online vendors at low cost ensuring easier accessibility to World's output of current information with greater speed and efficiency.

#### **6.4 Information Seeking Approach of Users**

A user's information often depends upon the purpose for which he is seeking information. A user may be seeking data on quantity of new publications in Hindi literature during 2004. The purpose may be to assess the validity of the demand of finances by a variety of libraries. This may be an ordinary everyday approach. On the contrary if the data is needed by the publisher, he will be interested to know the market position for his new publications that he is to launch. On the contrary, a user may be interested in knowing all the publications on a specific topic e.g. use of pesticides to control pests of wheat. The purpose may be to evaluate useful pesticides or to find a researchable area or to formulate a research proposal. This type of approach to information is known as Comprehensive or Exhaustive approach to information. Another approach of the researcher user who wishes to keep himself abreast of the developments in his field of specialization go by the name Current Approach. The current approach is a browsing approach i.e. the researcher likes to browse through a range of current information in the area of specialization of interest or closely related areas. By doing so, the user - a scientist, engineer, manager, teacher etc. comes to know of recent advancements in his field. This helps him to be alert and as such he updates his knowledge and becomes aware of new methodologies, interpretation, new theories and models developed, new results achieved, new products introduced etc. The current approach is an ongoing approach, a regular and useful activity considered essential to avoid obsolescence and duplication of effort.

The problem of keeping abreast also has affected the information seeking behaviour of users at different levels progressively. Since the end of Second World War there has been large expenditure on research and development by government and industry. As a consequence of growth in the volume of scientific and technical information, scientists, engineers, technologists and managers face several problems in accessing information and keeping themselves abreast of new developments. These are :

- (i) The rate at which new information is being generated, even in narrow areas makes it difficult for a researcher to keep himself abreast of new developments in his area of specialization;
- (ii) The increasingly inter-disciplinary nature of results i.e. the fact that

research and development is no longer done by individuals but by teams of researchers belonging to different disciplines has resulted in the scattering of information. It means that information relevant to a given discipline is also found in journals of other disciplines. For instance, information relevant to electronics engineering may be available in journals dealing with Solid State Physics, optic material science and electronic engineering;

- (iii) Useful information can occur in a variety of documents type. Until recently journal or periodical was the main medium of the communication of new information. Whereas this is there even today, other media in the last 50years have also emerged and grown e.g. conference papers, technical reports, patents, theses and standards. Information and Documentation Centres have attempted to help the researchers to cope up with the problems by providing different information services to improve the information Seeking Behaviour of Information Users.

#### **6.4.1 Current Awareness Services and their Types**

Awareness service i.e. a service which alerts the information user to information that is current or new or of recent origin. Current awareness service has the following characteristics :

- (i) The service is usually in the form of a publication, and attempts to bring information that is current or new or of recent origin to the attention of its users;
- (ii) the service does not seek to answer any specific questions that the users may have;
- (iii) the service usually confines to a well defined subject or topic. However, topics from related areas are also covered in the service;
- (iv) the service at times confines itself to a given type of literature e.g. patents or may cover different types of literature;
- (v) the service could be 'bibliographical in nature' e.g. a list of references with or without abstracts. The service could also be discursive e.g. A News Letter in this type of current awareness service, usually consist of short contributions from professionals with the objective of highlighting recent development or exchanging information and ideas;
- (vi) the service endeavours to alert its users to recent development or news as quickly as possible; and
- (vii) the service attempts to make browsing convenient and easy for the user.

Thus to satisfy the information seeking demand of the users, the libraries as well as the Information & Documentation Centres are providing following types of Current Awareness Services :

- (i) Contents-by-Journals Service
- (ii) Documentation Bulletins or Current Awareness Lists
- (iii) Research in Progress Bulletins

(iv) Newspaper Clippings

#### **6.4.2 Contents by Journals**

In this type of service, the library documentation centre or a commercial publisher distributes a publication which contains copies of contents' pages of Journals in a broad area e.g. life science, social science, etc. A very good example of contents by Journal service is the publication called current contents published by Institute for Scientific Information (ISI) in the U.S.A. If a library provides the service it normally restricts it to journals received by the library. The rationale behind this type of service is that the journals are the predominant medium for communicating nascent information. If users can be regularly informed of journal articles appearing in current journals in broad or narrow areas, the users would come to know of recent articles or papers in their areas of interest. The simplest way is to photocopy (duplicate) the contents pages of journal issues and circulate them individually among users. Another rationale for this type of service is the fact that users tend to value certain journals very highly and look forward to browsing through issues of these journals as soon these are received in their library. The contents page service enables them to quickly know the titles of articles published in journals of their interest. Once they identify interesting and useful papers, they can then go to the library and read the papers. Alternatively, they could write to the authors of the paper to obtain from them a reprint of the same. This way the user builds up his personal collection of useful information. This service is the cheapest and the quickest way of providing a degree of current awareness. This is because very little intellectual effort is expended in providing this service. However, the service also suffers from disadvantages, some of these are (a) A lot of effort is called for on the part of the user to discover information that is useful to him (b) Since the type of service provides only titles of papers, it is difficult to determine the usefulness of papers without actually the full paper.

#### **6.4.3 Documentation Bulletins/Current Awareness Lists**

This is the most popular and predominant form of current awareness service. In this service the library and documentation centre scans primary journals and other sources of current information received in the library to identify potentially useful articles of interest to their users. The bibliographical details of such articles are collected, and classified and grouped into broad or narrow subject groups. At periodic intervals (fortnightly, monthly, etc.) the collected bibliographic entries are listed under the different subject heading, class numbers or groups. The list is then duplicated and circulated to users. It is usual for documentation bulletins to feature the entries in the list in a manner that facilitates browsing. The subject headings or classification numbers and/or subject headings under which entries are listed makes it easy for the user to browse through the list. A documentation list could have an author and a subject index and a contents page. At times as a facility

a documentation bulletin may include abstract of papers listed in the bulletin. the inclusion of abstracts increases the value of the list for users as these provide additional information. The lists and bulletins are issued by the library and information Centres as an in-house facility for the users. This type of service is really important for users if due care is taken of subjects interest, research projects, product files etc., of the organizations and personnel. Secondly it is possible to slant the abstracts to highlight the usefulness of documents to the organization. Thirdly, the list can be featured to reflect the areas of interest or product profile of the organization. Fourthly the list can include information for more than one type of information source.

**6.4.4 Research-in-progress:** Bulletin is the third kind of current awareness service, and as the name suggests it alerts users to new research projects and progress made in ongoing research projects. Such current awareness service for users require the joint effort of more than one organization working in similar or closely related research area. Such a service can be provided by CSIR, ICAR in India. CARIS (Current Agricultural Research Information System) of (FAO) Food and Agriculture Organization is an International service that reports Agriculture Research. Similarly (CRIS), a computer-based information service is being circulated by United States Department of Agriculture (USDA). Such information includes information about the laboratory at which the project, and special equipment in use, if any. In addition it includes a narrative description of the research project along with progress achieved till date. The research-in-progress data bases in computer readable form like CRIS of USDA, can be used both for retrospective search as well as current awareness services.

**6.4.5 News paper Clippings:** Service is the fourth type based on current awareness media since they publish news of recent happenings on the political, social and economic front of a nation or region. Newspapers carry useful information to everyone from housewives to top managements of companies and cabinet ministers. Again, newspapers are of different kinds. Some of them are local or regional in their orientation and coverage, others are national or international. Further some Newspapers specialize in economic or financial news and contain in depth analysis of industry, trade, banking, commerce, etc. Given the above characteristics of Newspapers, it is not surprising that they are considered as valuable sources of information. Libraries and documentation centers have attempted to provide information services based on newspapers. One such service published is the Newspaper Clipping Service. In the Newspaper Clipping Service, a library subscribes to one or more daily or weekly newspapers, carefully chosen for their coverage of areas of interest to the organization of which the library is a part. Each of these newspapers is scanned and any items of news that is considered to be of interest to the user group are clipped (i.e. cut) and pasted on a sheet of thicker paper or card. The clipping is then assigned one or more subject headings or group/class codes. At periodic intervals (e.g. daily, weekly) the clippings are arranged by subject headings

or group code and disseminated to users. In a small organization batches of clippings themselves in one or more groups may be circulated to user. In large organizations, or where the circulation is wide, a bulletin containing the news items with or without annotation may be circulated. The clippings themselves are filed in vertical or suspension life folders for possible use at a later date. These clippings which are considered to be of very little use are discarded. Newspaper clipping services are quite common in libraries of government departments, banks and financial organization and industrial development agencies. The incidence of such services in scientific R & D organizations is considerably less.

### **6.5 Summary**

Information needs of users depend upon their category to which they belong. Among Education Research based groups, the researcher is the major user of information. It is necessary for him to avoid duplication of research keeping in view relevance, Currency and time factor. Among services important for him are CAS, SDI, bibliographical, contents by Journal service, Documentation Bulletin, Research-in-Progress Bulletins, Newspaper Clippings etc. Information Seeking Behaviour of users is dependent upon, on the one hand, his identification, trade, qualification, nature of work, etc, and on the other hand data regarding frequency with which he/she visits the library, ranking of documentary services and sources, his opinion on collection of the institution alongwith data concerning his opinion regarding use of material (collection) journal and periodicals etc.

### **Further Reading :**

1. P.S.G. Kumar : Library & Users : Theory & Practice : Delhi. B.R. Pub.2004.

Take up BACHELOR OF LIBRARY AND INFORMATION SCIENCE and be a librarian and information specialist who embodies the values of excellence, community, apostleship, and compassion. To know more about the Bachelor of Library and Information Science program, you can

To our valued library users, the series of recent earthquakes, as well as the current pandemic have brought adjustments and difficulties to our community. We understand that even with these trying times, the need for informational resources is a growing necessity, most especially that the mode of learning has switched to online. Library and information research (LIS) has grown significantly as more and more library and information science programs were established. The oldest LIS program in Indonesia is the Library and Information Department at the University of Indonesia (DIP UI) which was established in 1942. Since then, LIS at University of Indonesia has become a barometer for many other LIS programs in Indonesia.

write a scientific research paper (thesis) before gaining the bachelor of library science degree.

Library. human resources 11%, library building 18%, library science 4% and user satisfaction 7%. Library services. remained a dominant topic researched by students in that year.

Paper- B-101 - LIBRARY, INFORMATION AND SOCIETY UNIT " I: Role of Libraries Library as a Social Institution Development of Libraries in India Role of Library and Information Centres in Modern Society Five Laws of Library Science UNIT " II: Types of Libraries, Professional Associations and Organizations National Library of India: Concept, Functions and Services Public Libraries, Academic Libraries and Special Libraries Professional Associations: ILA, IASLIC, CILIP, ALA, Aslib, SLA National and International Organizations: RRRLF, UNESCO and IFLA Digital Libraries UNIT " III: Library Legislation Library Indexer, Library Specialist, Librarian, Assistant Director, Library Information Officer etc. Bachelor of Library Science (B.Lib) Eligibility Criteria. To be eligible for the Bachelor of Library Science programme, the candidates must have completed their graduation from any recognised University under the 10+2+3 education pattern. The candidates should have secured at least 50% aggregate marks in their qualifying degree exam as well to be considered eligible for B.Lib.Sc admission. Bachelor of Library Science Admission Process. Bachelor of Library Science admission process is a merit-based admi