INFORMATION SOURCES AND SERVICES

SYLLABUS

UNIT- I

Categories of standard Ready Reference Sources and their evaluation (Ready Reference Sources Categorisation according to Denis Grogran); Primary, Secondary and Tertiary Sources of Information, Electronic Information Resources.

UNIT-II

User Needs in College, University and Public libraries. User Eduacation in College, University and Public Libraries.

UNIT-III

Reference Service-Concept, Definition, Needs Purposes and Kinds -Ready Reference and Long Range Reference Service.

UNIT-IV

Search Strategy - Manual and Online Search, Methods of dissemination of Information - CAS, SDI Documentation Services - including Indexing, Abstracting, Translation and Reprographic.

UNIT-V

Bibliography - Concept, Definition, Needs and Purpose, Types, Reference Values, Examples Compilation of Bibliography Planning and Steps.

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INFORMATION SOURCES AND SERVICES

UNIT - I

1. **Categories of Standard Ready Reference Sources and their Evaluation *" (Ready Reference Sources Categorization According to Designation) Evaluation of Standard Ready Reference Sources:**

<u>**Webster's Dictionary**</u>
<u>**Criteria for Evaluation**</u>

Authority	A
Scope	S
Treatment	T
Arrangement	A
Format	F
Special Features	S

Authority
Webster's 3rd New International Dictionary Merriam Webster's
Edition
G & C Merriam Co. Spring Field Massachusetts
Unbridled 7 Language Dictionary
Biologist, Mathematicians and experts are acting as consultants include 200 members

I published	-	1909
II published	-	1934
III published	-	1961
IV published	-	1980

The librarian has to evaluate the previous works of reputation. He has to consider the background information given.

Scope
The scope includes purpose coverage and regency of the document. The Webster's dictionary has 6 lakhs entries in 1961 and the total is reduced to 4,50,000. About this 1 lakh new words are introduced. It discovers all the words in Science and Technology, Maths, Physics, Sports, Music's, Politics whether the book had fulfill the purpose or which it is written he should have special knowledge to determine the quality of articles, their accuracy and reliability of information.

Treatment
It provides spelling, syllabication, Parts of speech, etymology, definitions, capitalization, illustrations, quotations, pronunciation, usage and geography
It includes the accuracy style and objectivity. The librarian should consider the accuracy of information, facts and figure, which should not be, biased one. It should be a balanced one.

Arrangement

It is arranged in divided page. A good arrangement adds value to the reference book. It includes sequence, type of alphabetical chronological, classified and tabular order. Two types of alphabetization are there.

Word by word
Letter by letter

In Webster's the main alphabets occupies the upper part of each page. The lower part of many pages is occupied by the subsides, alphabets, rare words, proverb.

Format

Webster's is in three volumes set. It is well bounded and printed in good quality of paper. The format includes binding, quality of paper, type faces page, make up, illustrations, diagrams, maps.

Special Features

1. Two lakhs quotations are included from newspapers, magazines, and speech of politicians.
2. Charts and notes are given for each country.
3. A list of abbreviations used.
4. Guide to pronunciation is given
5. This dictionary is the oldest and most famous American English Language Dictionary.
6. It includes sketches, biographies and maps.

Encyclopedia

Encyclopedia is defined by Louis Shores as the lifeblood of professional Experience. We can now discuss about the Encyclopedia Britannica

S. No.	Propedia (1 Vol)	Micropeadia (10 Vol)	Macropeadia (19 Vol)
1.	It give out line of Knowledge	It act as the Ready Reference and Indexing Source	It is specially for special Readers.
2.	It guide to the literature of Encyclopedia Britannica	Concise and accurate information are given	4,200 comprehensive it thoughtful Essays are in
3.	It doesn't need Index because it is acting as an index	Having 14 Million words and 16 Thousand illustration in a actual forms	Bibliography at the ends of each Essay.
4.	Systematic outline of human knowledge.	Number of Cross Reference are given.	It was sign by the Original Author.
5.	It discuss about 10 major topics its Thousands topic essays are including.	1,02,000 Entries are including.	Treatment is scholar.

Primary, Secondary and Tertiary Sources of information, Electronic information Resources

Layout
        a. Primary Sources
        b. Secondary Sources
        c. Tertiary Sources
Information Sources and Services
              Formal
Documents
              Informal

S. No.	Primary	Secondar-y	Tertiary
1.	Original Report	Modified, selected rearranged	Distilled and collected from secondary source
2.	Not been filtered	Definite Plan	Help the readers in information seeking.
3.	Interpreted	Compiled from the primaries	Do not carry subject knowledge.
1.	Evaluated	Some times directive	
2.	Current one		
3.	Observation and Descriptive experiments		
4.	Some are not published		
5.	Unorganized scattered and disconnected information.		

Layout
d. Introduction
e. Forms of sources
f. Documentary sources
        i. Primary sources
        ii. Secondary sources
        iii. Tertiary sources
g. Non-documentary sources

Introduction
    In our current technological society, changes are occurring at a rapid pace-one of the most eminent changes that affect our lives is in the area of communication. Not only we rely heavily on traditional media, but we are also becoming increasing aware of and dependent on print communication forms.

Forms of sources
• Documentary sources
• Non-Documentary sources

Documentary Sources

Primary sources

Primary sources are the first published records of original research and developmental activities. Research findings are records and published first in the primary sources. These are the original medium of scientific communication. The following are important primary literature. .

Periodicals

It is a publication with a distinctive title, which appears at stated or regular interval.

Reports

A report is an account of work done on a research project.

Conference Literature

Many papers presented in conference usual research report work. Several months before publication in many periodicals. The main function of conference is

i) Announcement of new knowledge
ii) Exchange of information.
iii) Education.
iv) Fact finding and reporting
v) Polices formulation.

Patents

It may be defined as a "Specification concerning the design or manufacture of something which is protected by letters and secured for profit".

Standard and Specifications

These are documents, which states how materials and products should be manufacturers, defined, measured and tested.

Thesis and Dissertations

Thesis or Dissertations are an importance category of primary literature. University libraries have the collection of thesis submitted to their universities only.

Trade Literature

It may be defined as the "catalogue and other advertising or promotional material distributed by business firm usually free of charge".

Unpublished documents

Some important information's are transferred between scientist through letters and informal memoranda's. There are very useful.

II. Secondary Sources

The primary sources by nature are scattered and unorganized. By secondary sources tend to overcome this nature. The scattered primary information is collected. Compiled, consolidated and repackaged in secondary sources. The following are the secondary literature.

Secondary periodicals
Filtered and condensed primary periodicals are known as secondary periodicals.

Review publication
It is a periodical publication, which is devoted largely to critical articles and Review of new books.

Abstracts and indexes
Abstracts provide summary of text content in original document with Bibliographies details to trace original. Indexes provide only bibliographic data to identify the extent of knowledge in a field.

Reference Books
Users can search some documents defined a particular item and they don't extended search beyond that item. These are called reference books.

Monographs
A monograph is a single treatise on a small class of subject. *Treatise*
Treatise are the comprehensive sources which aim to cover a complete subject.

Text books
These are mainly used for Teaching and Learning.

III. Tertiary Sources
The advantages of the above two sources are analyzed and are present in tertiary sources. The following are the important tertiary sources.

Bibliographies
These are list of documents.

Guide to literature
To cases information a number of guide to literature are being published. These are used to identify secondary sources.

Non-Documentary Sources
The information which are transmitted to scientific world other than documentary sources are known as non-documentary sources. These are of two types
i) Formal - E.g. Radio, T.V. Conference
ii) Informal - E.g. Oral & Telephone File

Electronic Information Resources

Information Technology
UNESCO

According to "UNESCO" it denotes the scientific technological and engineering disciplines and the management techniques used in information handling and the interactions with men and machines associated with e-mail, economics and cultural matters. There are 3 different categories.

1. Computer Technology
2. Communication Technology
3. Information Technology

Supplementing Technologies
1. Micro Film
2. Micro Fische
3. Word Processing
4. Video Discs
5. Video Text
6. Tele Text
7. CD-ROM

In single terms a media computer is a one which integrates the various aspects of video and audio features with in itself multimedia has become the password of various technologies, namely computer technology, communicative technology and information technology.

Presentation of Multimedia is of

1. Text
2. Graphics
3. Drawings
4. Sound
5. Video clippings
6. Animations
7. Hyper Text

Hyper Text

A similar set of information may be presented in different forms. A list of words in a language can be arranged in a dictionary from called glossary or resembles thesaurus. It provides hypo linking pieces of the text.

Sound

Sounds like Music, Speech, Voices and Noise and so on. Important features of Sound Packages includes.
1. Recording

. Editing
3. Mixing
4. Viewing

It is concerned with 3 categories
1. Generation of primary information.
2. Secondary information the word and service
3. Communication of primary and secondary information

Objectives
1. Procure relevant document
2. Analyze the contents
3. Prepare Surrogates
1. Process Surrogates along originals.
2. Analyze and process queries.
3. Retrieving information
4. Evaluate Relevant Information
5. Relevant Information as reading

Needs and purpose
1. Information Explosion
2. Advent of Computers
3. Document pressure
4. Social pressure
5. Time value of information
6. Various advantages of IT.

Enhanced computing power and faster rate transmission play a vital role in promoting information technology.

Electronic Information Resources
The libraries with their traditions holdings in print format are now being added with electronic information resources in various formats like CD-ROM Database, On-line Database, E-book, E-Journal.

CD-ROM Databases
Electronic Information Resources in CD Format include abstracting and indexing services, Encyclopedia, Dictionaries, year books, back volumes patents, standards and mans other reference works. The CD-ROM technology has given ample opportunities for information services to end users.

DVD - ROM Databases:- (Digital Video Disk or Digital Versatile Disk)
It has 17 GB of high data storage capacity has made it possible to include more multimedia elements like video and sound to integrate many reference sources on a single disk. Some DVD Reference sources include Britannica DVD 99, Webster's international **DVD**

Encyclopedia-2000 Grolier multimedia Enemy, Eye Witness World Atlas DVD-ROM Deluxe edition. The complete National Geographic on DVD-ROM, etc.

On-line Databases

The usage of online database against their CD-ROM Counter parts has to be evaluated and decided on the basis of cost effectiveness and timeliness. Few online information services are KR Science base and STN. Which includes information sources like BIOS's, CA search. Else view Science, Publishers, Routers, NITS, etc. The STN International provides complete collections of depth databases in science and Technology.

E-book

An electronic book is the content of the book made available to the reader in electronic form. According to Libraries Information Science, Electronic Book is a term used to describe a text analogies to a book that is in digital form to be displayed on computer screen, Electronic books, or e-books are books in computer file format in read on all types of computers including handhold devices designated specifically for reading e-books.

Types of e-books
1. Down Loadable e-Book
2. Dedicated e-Book
3. Web accessible e-Book
4. Print on-Demand Book

Definition for E-Journals

Electronic Journal may be defined broadly as any journal, magazine, e-magazine, web zone, newsletter, or type of electronic serial publication, which is available over the Internet.

A very loose definition of the term E-Journal existing in electronic format would embrace all periodicals available electronically as well as in paper copy, including the text of periodicals accessible through online networks and those periodicals available in CD-ROM form.

Online
a) Pertaining to equipment or devices under direct control of the CPU.
b) Pertaining to a users ability to interact with a computer.

Offline
a) System where an aliquot is withdrawn from the effluent stream and conveys to the direct assembly.
b) Pertaining to equipment or devices not under direct control of CPU. (Aliquot- A part which is contained in the whole on exact number of items)

UNIT – II

3. User needs in College, University and Public Libraries.

4. User Education in college university and Public Libraries
User community - Assessment of information Needs and User Education

Layout
> h. Introduction
> i.Definition
> j. Aim
> k. Objectives
> l. Methods
> m. Levels
> n. Problems
> o. Conclusion

Introduction

MEWS defines this as "instruction given to readers to help them make the best use of a library". User Education is to concerned with the new information and communication process, and one part of this involves the total instruction of the user with the library. This should be a continuous process starting with school and public libraries and with the possibility of Extension into academic and specialized libraries.

Used Education would be a continuous process with the two components, orientation and instruction. Orientation is primary concerned with ways of introducing the user to the general techniques of library usage and services available and to the organization. Layout and facilities of a particular library. Instruction is concerned with learning to make use of the information resources available with in specific subject disciplines.

Definition

Mews defines "Instruction given to readers to held them to make the best user of a library".

"It is manifestly important to take steps which will improve the information consciousness of users and their ability to make the best use of available resources. This can be achieved if the users are educated in the proper use of libraries".

Aim

Communicate about a product or service and show how it fits in a broader forwards ^nd concern ofj users.
Explain the basic of its structure and function, limitation and problem.
Explain in detail was it can be crossed and used, it if necessary train for usage (such as one line searching)
Explain in detail the benefit that can be accured, and
Explain clearly direct and hidden costs requirement conditions of use.

Objectives
The major objectives of user education are the following:

Most of the School Libraries in India are located in remote part of the School Campus or attached to the staff room which will scare the students from making use of the resources.

Students should be instruction to fully utilize the available library resource and facilities.

User Education aims at guiding the clientele in using modern equipments user in information storage and retrieval and also the various scientific techniques used in libraries like classification and cataloguing.

The user education proves the way to familiarize the new types of documents and the method of using them

Methods of user Education
Lecture

Lectures can be used as a structure to present an overall view and to covers enthusiasm about the subject, more over lectures, can be used for groups the subject of different sizes-an advantage in practical time tabling. The Lectures might be suitable for providing a general introduction to course on information retrieval.

Seminars, Tutorials and Demonstration

Seminars, Tutorials ^nd Demonstration are given similar groups of students. Demonstration might provq|P be a good-way of teaching small groups of about five or six students the use of various tools used for information retrieval.

Audio - Visual Methods

During recent years three has been an increasing interest in the use of audio-visual media such as films, videotapes, tape slide presentation and audiotape for library user education.

Programmed Instruction

Programmed learning can be carried out by the user of a variety of Media-Books, Automatic Projection Slides, or by means of Computer Aided Instruction.

Levels of User Education

Students who form more than 90% of the user has be to treated with more care, individuals and group wise.

Pre-primary and primary level students will be in search of toys, storybooks, and simple machines. Their eagerness to know things can be satisfied fully by the reference librarian with proper orientation and instruction. Assignments related to their classes teaching will be of minimal at this level.

The-middle and the secondary students they like moral books and journals than toys and stories. They have to write assignment, do experiments attended workshop organize exhibitions, study tour etc.

The third group of students belonging to the Higher Secondary level. The earlier library experience higher self respects and independent outlook at this stage demands separate education to this group.

Place and Time of Conducting Courses

Most of the schools have allocated certain hour for library work. These timing can be utilized for providing user education.

The place for instruction or orientation can be in the classroom and in the library room. This will depends on the methods and technique used in teaching library help in getting first hand experience.

Problems

User Education is yet new concept in schools. This is due to many factors.

Lack of Qualified Librarians

Usually a teacher will be put in change of the library. He will be relevant even in to issue books for year of 100s of books.

Lack of Training in User Education

User Education being a recent feature in Librarianship, School Librarians have to be trained in providing such as Education as suitable to the different age and educational levels.

Lack of Equipments, Space and Finance

Organizing and conducting the user education programmed regularly, require variety of equipments and proper space and need finance as maintain the equipments and prepare teaching aids and supporting facilities.

Lack of Co-operation from teachers and Students

User Education will be effective and fruitful only if it is carried out with whole-hearted co-operation of teachers and students or the users in to with the librarian tour.

Conclusion

The Changing modes of Education, User Education plays a vital role.

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UNIT – III

**Reference Services Concept, Definition, Needs, Purpose and Kinds -
Ready Reference and Long range Reference Service.**

Layout
p. Introduction
q. Ready Reference Service
r. Identification of Ready Reference Service
s. Sample Questions in Ready Reference Service
t. Long range reference service
u. Various process involved in Reference Service
v. Conclusion

Introduction

The most common duty of a reference department is to answer queries. Reference Section in a Library provides answer to its users. Reference Librarian should anticipate the nature of Reference help required by its user. The assessment of user needs will help the section to build its collection property. In identifying the nature of service, the western approach is based on the following facts:

a)   Subject
b)   Types
c)   Purposes
d)   Enquiries
e)   Sources consulted

Dr. S.R. Ranganathan identifies two types of reference services namely.
1. Ready Reference Service
2. Long Range Reference Service

He proposed a set of criteria to identify the above two types of services. They are as follows:
a) Time
b) Source
c) Nature of information on library.

Ready Reference Services

Ready Reference Service is a fact-finding service. It becomes necessary on account of various difficulties faced by the readers in a library. There are much artificiality in between the readers and his documents. User needs assistants in having easy access to information through classification and catalogue. Ready Reference Sources do not resemble. Ordinary books. They are a number of peculates in many time information from ready reference sources may be wanted by absent enquiries.

Identification of ready reference service

Ranganathan has described the following to identify ready reference service
1. Time
2. Source
3. Nature of Information

Ready Reference Service is provided in a short time and in most cases immediately the time to retrieve to answer is any range between 30 seconds to 30 minutes seldom it may take more than half an hour.

Ready Reference Service is based on the standard ready reference sources they are:
a) Dictionaries
b) Encyclopedias
c) Year books and directories
d) Handbook and manuals
e) Bibliographic Sources
f) Geographical Sources
g) Statistical Sources
h) Bibliographies
i) Ephemerals (Newspaper, magazine)
J) News summaries and Digits

Sample Questions in Ready Reference Service
a) What is the meaning of the word synonym?
b) Who is the President of Iran now?
c) What is the name of the currency in Japan?

Long Range Reference Service

This service may take more than 30 minutes and the duration depends upon the users needs. The process of information flow may take days, months or years?

Long Range Reference Service may given with ready Reference Service at the time but it never ends with them. It may have to go beyond the resources of a single library. Sometime it goes beyond the regional boundaries and if necessary beyond national boundaries.

The nature of information required under Ready Reference Service is such that only ready reference sources are consulted. But long-range reference service may enjoy any one of the following methods:

1) Current awareness service
2) Selective Dissemination of Information
3) Documentation Service
4) Abstracting and indexing service
5) Translation service etc.

Under long range reference service the librarian may use computers/machines and equipments in aid of this service.

Various process involved in reference service

Dr. S.R. Ranganathan has identified three stages common to both types of reference services. They are:

a) b) c)

Preparation Service

Assimilation

Process in ready reference service Preparation

The Librarian should keep himself prepared. He should have a thorough knowledge about.

    a)   Standard reference services

    b)   Knowledge regarding the various editions in the categories

    c)   Knowledge regarding newly coming reference sources

Service

Ready Reference Service involves the following 3 methods, a) Provide the readers with exact information

b)   Putting the enquiries on the right track

c)   Training and enquires in the use of reference books and fact finding.

Assimilation

This requires the reference librarian to keep an integrated contact with his colleague and also recording of the facts located after which difficulty. Sharing also one's difficult experiences may help others to over come such difficulties. When the retrieved facts are recorded the same may be used for future reference.

Long Reference Service

Preparation

Each individual in the reference section will have to prepare himself before involving in the process of long-range reference service.

a)   A special knowledge about the subject.

b)   Scope of the subject areas involved

c)   Landmarks in the evaluation of the subject concerned

d)   Similar research organizations and published bibliographies in the concept field.

e)   Prepared document records.

f)   User's profile.

The librarian may have to consult subject or specialists on specific fields. He should develop a through knowledge in the concerned subject exploring all possibilities with out any pride and prejudice.

Service

It includes the following process

a)   Precise enunciation of users needs

b)   Providing the information

A tailored and situations form long-range reference service may employ many of the methods prescribed below.
a) Current awareness service
b) SDI
c) Documentation
d) Reprography Service
e) Translation
f) Any other automated bibliographic service

a)   Assimilation

Long-range reference service requires of full bibliographical mastering of the subject concerned. The Librarian should have familiarly with the developments in the universe of subjects is general assimilation here concentrates more on the evaluation of the service performance recording case studies and sharing the experience with colleagues in periodical meeting playing vital.

Conclusion

The efficiency of service producing the relevant information encourage the users to use the library and its services properly perfect and promote service in a library satisfaction the five laws of library service.

UNIT – IV

8. Search Strategy - manual Online Search Search Strategy

Layout
Introduction
Basis steps
Recognize and State the need
Developing the search strategy
Execution for the search strategy
Review search result
Editing search result
Evaluation of search result
Conclusion

Introduction

Searching is an important function of a information retrieval system. It may search for information or for documents such as books. Periodicals, Patterns, Thesis, etc. Essentially it is a problem solving exercise.

Basis steps involved in the process are
1. Recognise and State the need

1. Develop the search strategy
2. Execute the search strategy
3. Review search result
4. Edit search result
5. Evaluation of the result by the users

Recognize and State the need

In searching for information the searcher is guided by his or her perception of the need expressed by the user. Recognization of the need for information system should take the initiative process. This will be possible due to the interaction between the information professional and the users.

1. Active user will demand a search for the information requirements.
2. This request may either be short or long search.

Developing the Search Strategy

1. Formulation of Query
2. Select source to be searched and arrange them in a search sequence.
3. Translation of the query in different language.

Execution for the Search Strategy

In executing the search strategy one has to have knowledge of the data structure and search mechanisms to be searched. One must know when and whether to stop or continue a search. In spite of the cars taken in developing an appropriate search.

Review search result

In reviewing search result, the merits and demerits of the document will discussed avoid redundancy and may use of recall precision. If the review indicates satisfaction one can proceed to next step.

Editing Search Result

By Editing is mint the transformation of the search result into a usable format. This may involve arranging this result.

1. Arranging the search result
2. Highlighting the important entities
3. Adding more information
4. Reformatting Tables into a well organized package.

Evaluation of Search Result

This is the very important step searching for information in a database in response to a users query.
1. Have the search results met with expectation? If no search again
2. How helpful were the search result?
3. What can be learned for future searching?

Conclusion

Soger suggest the need for good documentation of the search would be helpful for future searches.

Manual Online Search
Layout

1. Introduction
2. Definition
3. Online SDI
4. MEDLINE
5. DIALOG
6. ORBIT
7. ESA/IRS
8. EURONET
9. TELENET
10. TYMNET
11. Conclusion

Introduction

Online access may be available to local database or external databases across geographical barriers. The searching is made through an online terminal connected, via the telecommunication; network, to a host computer. For distant communications, a telecommunication network is required via either leased or dial-up lines when a database is needed through an international telecommunication network, access is made through a local node of network using a telephone. The local node is usually a microcomputer that transmits message through a large computer.

Definition

In Canada the largest online computerised library system is UTLAS in Britain, the largest online system is BLAISE. BLAISE offers online services through a large number of databases under various names and styles, such as MEDLINE, SDILINE, TOXLINE, CHEMLINE, CANORLINE. In Europe, online access is available to ESA and DIMDI

The North American telecommunication networks are TYMNET and TELENET. They have more than 200 nodes in Europe and other parts of the world. The nearest point to India is at HongKong. These Networks provide access to almost all the major American Online services. Euronet provides online service to EEC countries mainly, but it is begin extended to other countries also buy interconnecting with the host computer systems for some countries. In India, online interconnection with ESR has been made on an experimental basis.

Online SDI

On line selective dissemination of information service has been possible owing to random access searching and random access memory to keep users profiles. The current information is made input under specific areas as required, and the prepared existing files are updated at regular intervals as and when needed to prepare the data files for SDI. In libraries and information

centres where SDI services are offered an adequate number of profiles is maintained and online profile are developed by the input and editing system. The SDI service is a personalised information series.

MEDLINE

In the mid sixties, the National Library of medicine in the USA produced the printed index medicus. The data were kept in the computer readable form and the files were known as medlars. These database were generated files of computer readable bibliographic description in the batch process for access to offline, searching. The database of medlars is available on online search service and the service is known as Medline, which was wet up in 1973. The software is known as Eithill. The National Library of medline offers online bibliographic search service. Now with more sophisticated software. Toxline consists of ten separate collections of secondary information in the field of toxicology and an EBM370458 computer at the national library of medicine, Washington, USA, operates environmental pollution .CHEMILNE is an online dictionary file with enables the users TOXLINE to describe chemical substance before beginning a search medline.

DIALOG

The online system with the search language, DIALOG is a commercially accessible online database operated by lock need information services at Palo alto in California, USA. It was an IBM 360/65 computer DIALOG is a outstanding successful online system and a principal leader in the online service with wide publicity in Europe it created a tremendous impact on computerised library and information services in Europe, and it has made significant contribution to online service in Europe. DIALOG contains over 16 million bibliographic citations available online, and these are constantly being reviewed and updated. A dialog search is expressed through search words or thesaurus terms with the comments like EXPAND SELECT, COMNINE and TYPE. The command or instruction is made input through an online forming keyboard for processing by the computer. The output is displayed on the screen and then the searcher can proceed with the next command or can modify his search by the interactive method. It has online current awareness and selective dissemination of information services.

ORBIT

The system development cooperation is also a pioneer need for commercially accessible. Online services it is located at Santo Monica, California, USA. SDC and lock need are the two largest online database organisation in the world SDC prepared a software package for online searching in 1968 known as orbit. It has over fifty database. It uses and IBM 370/158 Computer. Some of the database available through ORBIT are ACCOUNTANTS', AGRICOLA, BIOSIS, CAS77, CHEMDEX, ENERGYLINE, EROVTROLINE, ERIC, INSPEC, NTIS, TITUS, Etc. ORBIT has over 12 million bibliographic citations online.

ESA/IRS

The European space agency operates network links with many computer installations in various European countries. ESA Formerly used the software package known as REON, and the online database was known as ESA/RECON.

The Information Retrieval Service of the European space agency used ESA/RECON. At present, the version of recon has been revised and the software package is now knnwn as QUEST. The ESA/IRS Database systems provides access via online process to more that twenty database mainly on nuclear and space science. IRS uses and IBM 360/65 computer located at Transcati near Rome. The operational information retrieval service network of the European network. It is now known as ESA NET. It serves usually the west European countries ESA NET is planning to provide ready and equal access to scientific and technical information for all member countries of the European economic community through international telecommunication networks. Thus, online data service and information exchange can be possible among all the member countries.

EURONET

Euronet is a European online information service operation to after access to a large number of databases and the sharing of resources among the member countries, as well as access to online database to across geographical boundaries to the member countries. The countries are inter connects by the online system for sharing of information and online information retrieval. A system has been devised known as DIANE, which offers online search service using the packet. Switching data transmission networks, with such latest technology, information is transmitted in backets by switching operation. It is fast, reliable and effective on available lines and it makes automatic corrections of transmission errors.

A large number of databases created in the member countries and other online agencies such as MEDLINE, DIALOG, ORBIT, CANCERLINE, IMS, ISDS, NASA, etc. is available in EURONET, many best online computer are interconnected in EURONET such as BLAISE, INFOLINE, ESA IRS information retrieval service, DIMDI and online host systems of other member countries.

TELENET

Telenet is an online network operated by bolt Baranek and Newman in North America Lack need and the System development cooperation database can be accessed via this network in the European countries through trans Atlantic telecommunication.

TYMNET

TYMNET is a network operated by time share in. The network having online service is based in North America, but it has tele communication access to several modes in Europe. Lock need and SDC database can be accessed also by this online network to European countries.

Both the online networks, telenet and tymnet were implemented in the early seventies in North America and were accessible to Europe and other countries of the world. They have more than 200 nodes in North America and several nodes in Europe in London, Paris, Rome, Vienna, Geneva the hague, brevessers, prank fart and other cities as well as in other cities in Asia and South America like Hong Kong, Manila, Singapore, Sanjuan, etc. Through these nodes, the searches can dial and have online access to principal databases.

Methods of Dissemination of Information - CAS, SDI, Documentation Service including Abstracting and Indexing translation and Reprographic Service.

Current Awareness Service

Layout

w. Introduction
x. Meaning
y. Definition
z. Characteristics
aa. Need
bb. Kinds
cc. Forms
dd. Conclusion

Introduction

Current Awareness Service is a important service given in all type of library. It is unto data current and a Quick Service. It is acting as a Reference Service given to the user community.

Meaning

Library is the growing organism, which is helpful to develop the knowledge. Knowledge is different for different person. Current Awareness Service will give to special interest to individual interest. It is acting as a new method and technique, hypothesis what people will do now? How they can do it in better way and new problem to be solved by CAS?

Definition

'STRASS' Defines "Establishment of a system for reviewing publication immediately upon receipt selecting information pertinent to the programme of organization served and recording individual items to be brought to the attention of those persons whose work they are selected to it. It involves a combination of processes including. The selection of pertinent information from periodical books, pamphlets, patents, reports infact from anything of source content that is received".

Characteristics

1. CAS will give current information and up to date knowledge.
2. It is not particular but general. General information can be collected.
3. It is acting as a Quick Service.
4. It will cover information in Broader Coverage.
5. It should be used as a supplement only (not permanent)
6. It is for temporary use.

Need

1. To save the time of the Reader
2. Scarcity of finance
3. Growth of literature up to date.

Minds

There are two kinds of CAS:

1. Services directed towards individual group of users (Telephone-Dial up service).
2. Services directed towards all kinds of users (Indexing, Abstracting, Bibliographic Services)

Forms

Routing of Journal Circulation

a) Circular Routing
b) Radial Routing

Circular Routing

In Circular Routing the document will be borrowed from the librarian and it is circulated to student 'A' to 'B' to 'C & 'D' and then to the librarian. In this method, the document can also be missed or not rotated to the other users.
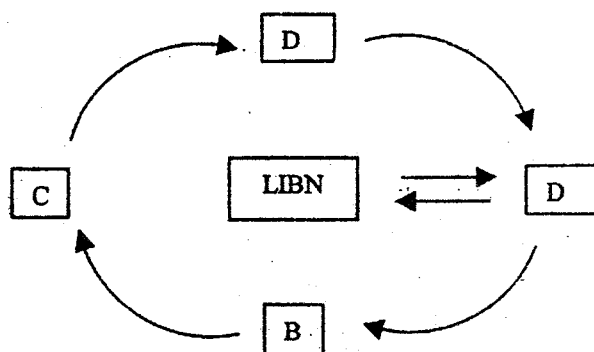
Radial Routing
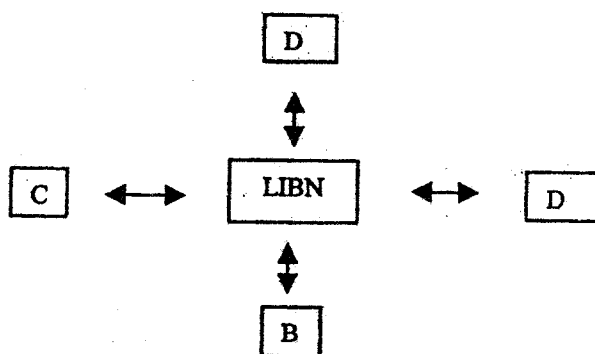
1. In this method the document will be borrowed by the student and it is returned to the library in certain period. Everyone is given a chance in this routing.
2. List of periodicals received (issue number and volume number) should be noted for this service.
3. Current content service (INSDOC Current content periodical)
4. The Library Bulletin should note the new arrivals of the library; achievements done by the library staff and the meeting conducted for that academic year.

5. The Librarian should prepare about the Current Awareness List and it should announce the Research Paper in progress.

6. The notification of fourth coming meetings should be announced the CAS should do the daily intelligent service, newspaper clipping service. The important examination and the opportunity present in the Newspaper clipped in the Notice Board.

Selective Dissemination of Information (SDI)

Layout
ee. Introduction
ff. Definition
gg. Factors
hh. Steps
ii. SDI service
jj. Conclusion

Introduction

SDI is based on the concept of personal service. It is one of those services, which are directed towards individuals so as to cater to individual requirements. The basic concept begin SDI consists of matching information/documents with the profile of each individual to the clientele. The profile can be of a single used or of a group working on the same subject field. Those items which match are brought to the attend of user. In case computer is available then this service can be performed effectively.

Definition

Lukh defined SDI "as that service with in an organization which concerns itself with the channeling of new items of information from whatever source to those points within the organization where the probability of usefulness in connection with current work or interest is high.

Factors involved in this development of SDI Growth of literature

The volume and variety of literature being published in various fields especially in science and technology become enormous. Hence this put the users in confusion to retrieve the right information.

Interest of users

The information officers found it difficult to know all the interests of the users being served by them. Very often the interests kept on charging.

Availability of Computers

With the computers the match of content of documents with the interests of the user could be done easily.

Steps involved in SDI

Construction of Users Profile

The first step consists of creating profiles of the users of SDI services. The field of interest of each user is recorded in terms of specific set of key words, code numbers, terms etc. selected from thesaurus. This record of interest is called a profile which is transferred to computer storage an magnetic tape or any other is also included. The profile becomes the first input.

Construction of Document Profile

In this learning documents are analyzed and the subject of each of them is presented in the same indexing language that has been used in the construction of user's profile. Depending upon the significance of the document, the bibliographic details, the information and indexing terms are stored on the magnetic tape. This becomes second input.

Matching of the User and Document Profile

The computer matches the two inputs at a predetermined stage. The output is printed in the form of two punched cards. One punched card is called information card. This contains either the list of documents or information itself along with bibliographical details of the documents. The information card has a tear off strip request note. The other punched card is called response card.

Issue of Notification

The two punched cards are sent to the users, whose interest match with the document or information. The user keeps the information card for his use. In case he wants to consult the document, he tears off the request note strip and sends it to the library. He also returns with it the response card, in which the degree of interest in a particular document is indicated.
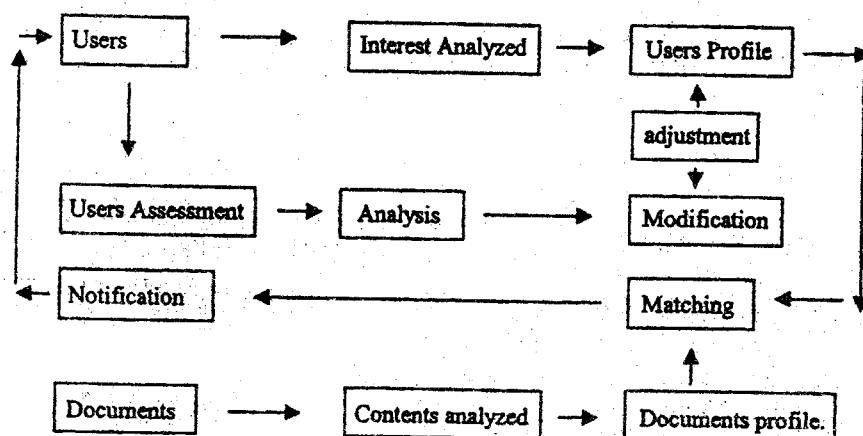
Feed Back from the Users

The library takes action an request note strip to send the documents to the concerned user on keep it in the library for him. Response card served as a feed back system, which helps the library to know the usefulness of information provided as well as change in the interest of the users.

Profile Modification

Named on the results of feed back analysis an active phase of profile modification has to be initiated. The profile performance should be evaluated, modification needed in the profile should be identified and the profile should be updated.

Operation of SDI

```
  ┌─→ Users ──────→ Interest Analyzed ──→ Users Profile ──────→
  │     │                                      ↑
  │     │                                  adjustment
  │     ↓                                      ↓
  │  Users Assessment ──→ Analysis ──────→ Modification
  │  Notification ←──────────────────── Matching ←────────
  │     ↑                                      ↑
  │  Documents ──────→ Contents analyzed ──→ Documents profile.
```

SDI Service
Catalogue Cards SDI

J.E. Rowers has outlined a very simple manual SDI System for the dissemination of information extra copies of catalogue cards are used for items that have appeared in the library. This will be useful to the user and also simple for the library to send it out.

SDI Computerized Service

A number of computer based SDI systems for individuals have now been developed in many fields. An individual can be in the form of a magnetic tape or disk or microform those selections of the subject fields covered by the computerized service, which are related to his field of interest.

Telephone Service

Telephone calls can after be a strong means of disseminating information and keeping the librarian informed of what is happening in the organization. But this service is effective only in small organizations.

Face to Face Conversation

The librarian should spend time on talking to his people to know their research projects and programmes. It can enable him to learn much of value and he is able to pass on the desired information from the documents.

INDEXING

Layout
kk.   Introduction
11.   Definition
mm.   Factors
nn.   Functions

∞   Origin
pp.   Subject indexing
qq.   Types
rr.   Evaluation
ss.   conclusion

Introduction

An index is "a systematic guide to the text of any reading matter, or to the contents of other collected documents material". It is arranged in alphabetical order to other chosen order and with references to show where each item index is located usually index is arranged alphabetically but some times arranged chronologically, geographically, numerically or in any other suitable manner depending upon the requirements.

Definition

According to Bonn, "An index is a detailed alphabetical list of the names, terms, topics, places, formula numbers or other significant items in a completed work with exact page references to material discussed in that work".

Factors

Enormous growth in published literature due to the invention of printing press.
Diversity of publication
Language barrier
* Scatter of published information and others.

Functions

Facilitates identification of a published document
Selection of specific documents for photocopies for study.
Preparation of subject bibliography
Brings together all current publication

Origin

The catalogue of scientific papers 1800-1900, published by the Royal Societies of London was the first efficient indexing.

Subject Indexing

Conceptual analysis and translation are two principal steps in subject indexing. Conceptual analysis involves deciding what a documents is about, what it covers and also why it is likers to be interest to a particular group of users. They are two types of subject indexing namely PRECIS and POPSI.

Types

1. Book indexes
2. Index to collections
3. Periodical indexes
4. Newspaper indexes

Book index
The index to the book represents an example of a book index.

Index to collections
This includes index to collections of poems, fiction, plays, songs, essays, stories bibliographies, etc. Eg. Essay and General Literature Index.
1900-33, New York, Wilson, 1934

Periodical Indexes
These are 3 types
General Indexes
Subject Indexes
Indexes to simple periodicals

General indexes
It covers many periodicals in a wide field of knowledge.
Ex:- Citation Index.

These cites primary works on a subject by author and title. Each of an authors cited work along with its citing authors and their papers is arranged in chronological order citation means authors reference to previously published material.
Ex:-   Science citation Index   Science Citation Index has 3 separate indexes namely citation index, source index, Permuterm Subject index. Citation index is arranged alphabetically by cited author and with in this the arrangement is by chronology by cited year. Source index is a complete author index for citing authors. Permuterm Subject Index is an alphabetical list of significant words extracted from the titles of all sources.

Subject Index
These are those indexes, which cover several periodicals. It includes new books, pamphlets, conferences proceedings, reports, etc
Ex:-   Library Literature: An index to library and information science. Indexes to individual periodicals
This very in quality and completeness. They are user any issued on annual basis.
Ex:- Ulrich's International Periodicals

News Paper Indexes
They are 2 types
i)Indexing many News paper
ii)Indexing a single Newspaper
Ex:-   Indian News Index.

Indian press index is a separate quarterly supplement to the index, covering book reviews all Newspaper.

Indexes
Book Indexes
Index to Collections
Periodical Indexes

News Paper Indexes
General Indexes
Subject Indexed
Index to simple periodicals.

Evaluation of Index to Periodicals

1. While evaluation the purpose of index to periodicals should consists of
2. Authority
3. Scope
4. Arrangement
5. Entries
6. Items of information
7. Special features and draw back
8. Format and conclusion

Authority
i)Which is the sponsoring body?
ii)Is it is recognized?
iii)Has the indexing been done by a competent person?

Scope
What are the limitation with regard to subject, languages, place of origin of periodicals and length of period covered?
ii)What is the number of periodicals indexed?
iii)What are the kinds of periodicals?
iv)Is it current or retrospective one?

Arrangement
i)Dictionary-wise
ii)Author wise
iii)Subject wise
iv)Author and subject wise

Entries
i)Which kind of entries is provided do they include author and subject entries and cross-references?
ii)Do they give a list of periodicals indexed?

Items of information
Do all entries provide full information like authors name full title, volume, year, illustration, pagination, Title of periodicals, etc.

Special features and Draw backs
i)What is the frequency of publications?

ii)Quality of indexing

iii)State whether it is a unique publication?

Format

i)Are the headings bold enough to stand out clearly?

ii)Are the type faces clear and eligible?

Conclusion

i)Should include over all judgment about the work?

ii)Should it be recommended for a library or not?

Automation indexing

Computers can be applied in automatic indexing. CITE (Computerized Information Transfer in English) is a natural language CITE can operate on database of records consisting of index term. The system can stem words automatically.

Indexing AIDS

Indexer must have some way to record the results of the indexing operating. For this 4 possible way exists.

Recording on the document itself.

Completing some kind of form printed in paper

Recording on a Audio tape.

Completing a form displayed online.

Conclusion

Indexing provide a new approach to meet the requirements of research scholars. This facilities easy search. Computers are used to fasten the work.

ABSTRACTING SERVICE Layout

tt. Introduction

uu. Definition

vv. Origin & Development

ww. Functions and Purpose

xx. Types

yy. Qualities

zz. Preparing an Abstract

aaa.   Examples of Abstract

bbb.   Auto Abstracting

ccc.   Conclusion

Introduction

Abstracts are a summary of a document along with adequate bibliographical details. Abstracts are arranged in some systematic order, mostly in classified order.

Definition

According to Robert E.Maizer, "An abstract is a condensation has presents objectives, scope and finding of a document". In general it is the brief description about a documents.

Origin and development

On 5th January 1665 Doris Desollo Price first published abstract journals, called Journal de scarens on 6th march 1665 first volume appeared in London. About 19th century it becomes difficult for a scientist to digest the literature. Therefore, abstracting periodical could provide a solution.

Functions and purpose

1. It helps in keeping one up to date with new knowledge.
2. Abstracts enable readers to select the most important material quickly.
3. Informative abstracts can be a substitute for original documents
4. Facilitates rapid survey about documents
5. Helps in improving indexing.
6. Aids in writing of reviews
7. Helps to select documents
8. Provide access to a document for Retrieval purposes date
9. One can easily describe a document by means of single sentence.

Types - Abstracts

Indicative abstracts
Informative Abstracts
Indicative - Informative Abstracts
Slanted Abstracts Critical Abstracts
Titular Abstracts Graphic Abstracts
Telegraphic Abstracts
Numerical Abstracts
Of them important abstracts are

Indicative Abstracts

This indicates the contents and does not provide specific information about the content. Its purpose is to alert the user about the availability of a document.

Informative Abstracts

This gives briefly the main ideas, methodology, discussion, date, etc. of the document. Some informative abstracts are so good that there is no need for consultation of the original document. They get adequate information. This type is suitable for experimental work.

Ex: Chemical abstract

Indicative - Informative abstracts

This combines the character of both. In such abstracts less important aspects are treated indicatively, while more significant aspects are treated informatively.

Slant Abstracts

When an abstract is oriented to serve a special group it is called as slanted abstract.

Critical Abstracts

When an abstract deliberately evaluate the document and comments on the audience level, treatment of subject, adequacy, bias of a work, etc. is called as critical abstracts.

Titular Abstracts

The title of the document representing its content is titular abstract. In scientific documents the title usually indicate the subject.

Other types

An abstract may be named after the abstracter.
1. Author Abstract
2. Specialist Abstract
3. Abstractors Abstract
4. Article Abstract
5. Patent Abstract
6. Abstracts of Standards
7. Abstracts of Bibliography
8. Graphic Abstract

Qualities, Contents and Format of an Abstract

A good abstract should be brief, precise and objective. Abstract should be free from in accuracy and vagueness. Final abstract should be free from subjective judgment of the abstractor. Language must be simple, straight and understandable. These are the attributes of a good abstract.
Preparing an

In the preparation of an abstract, generally three stages are involved.
1. Identification of significant information
2. Organization of the identified information or data.
3. Writing of an abstract
The document should be carefully read so that no key fact is left out significant points should be marked out. The document may be reread to ensure that all vital information has been identified and taken of
The second stage is the organize the identified significant information in a logical order. It should be in the order of purpose,
scope methodology, Data, Results conclusion and Additional y un Information.
The 3^{nl} final stage is the writing of an abstract. While writing an abstract, it should be seen that language is simple clear. Expression
is concise and crisp; abstract should in a single paragraph. It should ^ate not be repeated symbols, abbreviations etc. should be avoided and only standard terms are used.

Example of Abstracts
Chemical Abstracts
Engineering Abstracts
Biological Abstracts

Indian Library Science Abstracts
Information Science Abstracts, etc.   Library Information Science Abstracts (LISA)

Auto Abstracting
A machine or computer produced abstract is an auto-abstract. Computers can be programme to select sentences from documents

1. A stop list eliminates all the non-substatftive words from further prdcessing.
2. Occurrences of all remaining Words are counted and the words are ranked.
3. All words occurring more than X-times are defined as "high frequency" or significant words"
4. A Significant factor for each sentences is calculated by finding words that occur frequency and finally. Highest significant factors are selected and printed out in the sequence in which they occur in the text, to form the abstract".

Conclusion
      Abstracts are of immense value to researchers for current as well as retro spective searches number of documents abstracted is increasing tremendously. Receenormously. Thus abstracting service facilities easy search.

TRANSLATION SERVICES LAYOUT
Introduction
Types
Nature
Translation Banks
Directories of Translators
Service
Conclusion

Introduction
      Some people believe that it is becoming more difficult as information is being communicated in more and more number of languages. There is also some evidence to show that the Language English speaking world, because of the present English language. This uncertilated the strengthening of information support and the Launching ©r translation programme. It may be easily appreciated. That we get different value of the language barrier depending on the side of the barrier from which we are looking at it.

Types of Translation
      Translation of documents are mainly of two varieties some books are translated and published in the usual manner such documents get listed in the book trade catalogues national bibliographies, etc. and are also available through normal commercial "channels. Hence, they do not poses any special problem for the librarian or the reader. It should also be remembered that even when a reader specifically makes a request to a translating agency or a documentation centre to translate a document, it is necessary to find out first whether a translation of the document exists anywhere.

Unpublished Document

Most of the documentation centers and big scientific and technical libraries have created some facilities to locate and procure unpublished translations and also do some translations on request. Apart from these, special agencies have been created where translation are made and collected for further use. These are often referred to as translation pools or translation banks. It has already been said that translation work by its nature is extremely expensive and time consuming.

Nature of Translation work

The two most important questions that are frequently asked and which have to be answered by librarians and documentation lists are.

a) Is a translation (in our case into English) of a specific document readily available? If so where, and.

b) Who can translate a document in a particular language and in a particular subject?

The Translation Banks

It would be appropriate to consider the activities of some translation banks, which are relevant for us.

c. The National Translations Centre (NTC)

The NTC is located at the John creser librians, Chicago. It is a depository and information source for unpublished translations into English from world literature of the natural physics, medical. It is a co-operative non-profit enterprise and its services are designed to eliminate mostly duplication of translation effort and to free funds for translating new materials. Many scientific and Professional Societies, governmental agencies, universities, and other institutions in US and abroad deposit in centre the translations prepared by them.

In 1967 NTC started publishing its new index under title "TRANSLATIONS REGISTER-INDEX CTR-I) which is a semi-monthly journal. The NTIS (National Technical Information Service) also lists its translations, along with research reports, the government REPORTS ANNOUNCEMENT.

d. The International Translation Centre (ITC)

The Center came to existence in 1960 under its former name the EUROPEAN TRANSLATION CENTRE. It is located at DELFT IN NETHERLANDS. The General AIM is "to act as an instrument for the exchange of information by means of translating and prevention of duplication of translation work"

It performs only those operational tasks, which it feels, can be better performed on an international level. For notification translations the ITC publishes the WORLD TRANS INDEX since 1978. This publication is, infact jointly brought out by the ITC and the pairs and replaces the former WORLD INDEX OF SCIENTIFIC TRANSLATIONS AND LIST OF TRANSLATIONS NOTIFIED TO ETC; TRANSLATION BULLETIN and BULLETIN DESTRANSDUCTIONS.

The first issue of each volume and annual index also contain a list of journals, which are currently translated cover to cover.

BRITISH LIBRARY LENDING DIVISION (BLLD)

In British, the important depository of translations is the BLLD. Most of the translations procured by it are from Russian, if not only collects a large number of translations, including a number of cover-to-cover translation journals. The announcement tool for new translations since 1978. Two new problems were launched - the BLLD ANNOUNCEMENT BULLETIN and BLLD REVIEW.

4. THE INDEX TRANSLATIONUM

Any discussion of translations cannot hesitate, ignore one important international tool, which is being published by the UNESCO since its inception, under the title, INDEX TRANSLATIONUM, Infact this is the second series of this publications, the earlier series was published by the Inter ration Institute of Intellectual co-operation" since 1932, under the title PETORTAOIRE INTERNATIONAL DESTRADUCTIONS INDEX

Directors of Translators and Translation services

The Translation banks and their respective indexes that we have considered above are able to answer the question we posed early translation of known document available. The indexes can be considered as current bibliographies.

Some of the translation banks are also equipped to answer other equally important question - who are the people or who can translate a document of a particular nature.

INSDOC

Published Roster of Indian Scientific and Technical Translators.

Translation Service to the Indian Scientists

INSDOC also takes a service and does successfully. One important aspect of INSDOC translation service is that a good percentage of the translation work is done by scientists and technologists who have desired some foreign language profeciency and are willing to translate in their spare time for the benefit of others. INSDOC has been bringing out the NATIONAL INDEX OF TRANSLATIONS (NIT) since 1981. It is published monthly and lists the translations prepared by 23 collaborating institution in India.

Two publications have been broughtout they are INDIAN SCIENTIFIC AND TECHNICAL BOOKS - AN ACCESSION LIST, this bio monthly Russian books into English. The other publication the CONTENTS LIST OF SOVIET SCIENTIFIC PERIODICALS (monthly) sources.

Conclusion

Most of them are English translation of Russian Periodicals done by INSDOC, INSDOC alone receives 148 of these. This is not bad performance when we see the title by 225.

REPROGRAPHY AND REPROGRAPHIC SERVIES

Layout
Introduction
Definition
Reprographic methods
Reprographic services
Conclusion

Introduction

The term Reprography was coined at the first international congress of Reprography, which was held in cologne, Germany in October 1963. The first photographic process was invented in 1824 by the french printer who was able to produce photographic a silver plates developed with mercury vapour. Reporgraphy in India was introduced around 1941 when sri M.C. Trivedi of Government Phot Registry Bureau Poona, presented a paper "The film process for copying documents its usefulness for copying old historical records". Government Photo Registry Bureau Poona was the first Government Department in India, which had a set up reprographic services.

Definition

Landan defines it as "the are of producing single or multiple copies of document, whether by photographic or other means".

Reprographic methods

The reprographic method of reproduction of documents can be categorised into:
1. Non-Photographic
2. Photographic

Reprographic Techinique - Non-photographic

The non-photographic process of reproduction of documents includes MANUAL and MECHANICAL.

These are 4 methods in manual technique:
1. Manual Transcription
2. Typewriter
3. Electronic typewriter
4. Flexowriter

Manual Transcription

Making of copies by manual transcription is as old as writing itself and it still continues, which need simplest equipment-pen, ink and paper.

Typewriter

The invention of typewriter brought about a revolution in manual copying of this machine saved much of human and made writing faster.

Electronic Typewriter

It is a machine which in more convenient to use and give quality output. **Flexowriter**

A flexowriter is essentially an electronic typewriter with two added units the punch and the reader. The punch is operated by the board similar to an ordinary typewriter and punches a" pattern of holes on a paper tape. This punched which operates the machine automatically by the electronic impulses to reproduce the informing at a high speed.

There are 3 methods in mechanical technique:
a) Stencil duplicating process
b) Offset duplicating process
c) Hectographed process

Stencil Duplicating Process
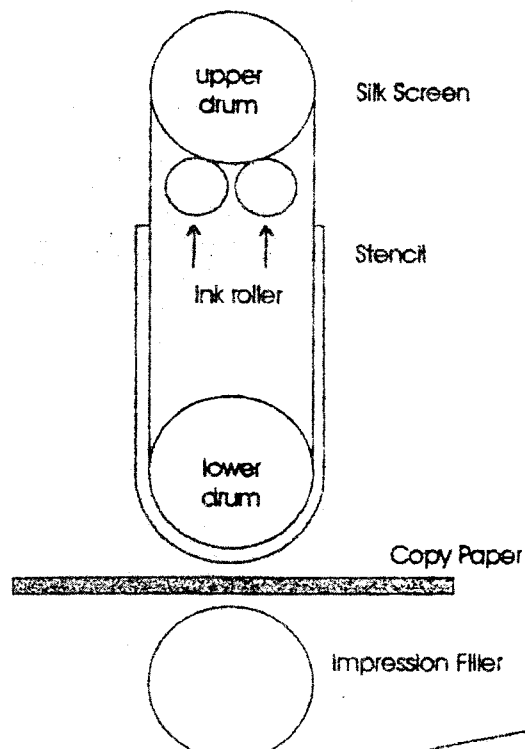
This process is also known as **'CYCLOSTYLING'** or **'MIMEOGPvAPHING'**. The stencil is coated with a fine layer of wax or any other material, which is impervious to ink. When the stencil is prepared for printing, the sheet to be reproduced in written on it manually by a styles and typed on it by a typewriter without damaging the original.

Offset duplicating process
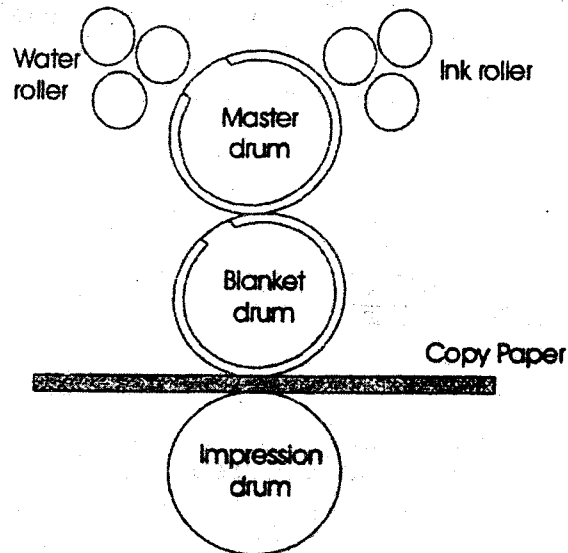
The offset duplicating process is based on the principle that WATER AN OIL DO NOT MIX. In this processes, the greasy image on the master is receptive to oily ink, while the background used. Which is wet is not receptive to the oily ink. The result is that the ink sticks only to the text area, which is to be reproduced.

Hectographed Process
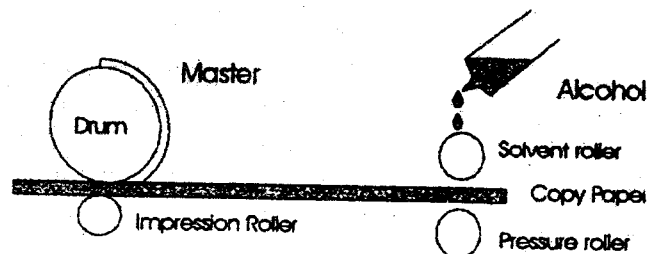
This is method is otherwise called as GELATINE DUPLICATING PROCESS or spirit duplicating process. In this process, any image is either drawn or written or typed on the master drawn. Then it is put in contact with gelatin layer. The right reading image is transferred as reverse reading on the gelatin. A copy paper is put in contact with the gelatin surface to get a right-reading copy. About 100 copies can be prepared by this process.

Reprographic Technique - Photographic
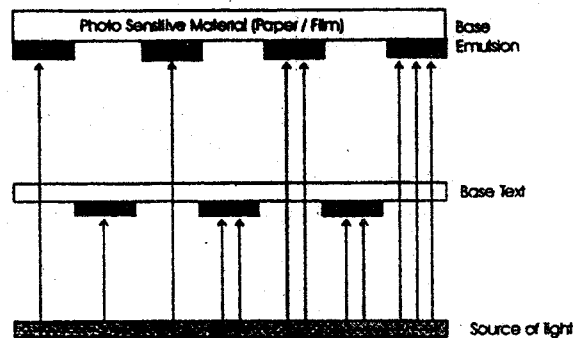The photographic technique involves two steps
1) Exposure method
2) Development method

1. Exposure method

There are three methods of exposure which are generally used for making photo copies
a) Direct contact method
b) Contact/reflex method
c) Optical method

a)Direct contact method

This method is used when the object copied in transient and the text is on its one only. The original in this process is exposed to light with its blank side in contact with the emulsion side of the photosensitive method and the text side towards the source of light. The light passes to the photosensitive material text, but is blocked by the area occupied by the text. Thus, the area occupied by the text remains unexposed while the rest of the area gifts exposed and their content image on the photosensitive material.

b) Contact Reflex Method

In this process, the photosensitive material (paper/film) is exposed to light with its uncoated side towards the source of light and emulsion side in contact with the copies. During the exposure, light first passes through the photosensitive material. Without affecting it and strikes the text side of the original. While the area covered by the text absorbs the light while the area where the text reflects it back on the emulsion side of photosensitive material. Thus forming a latent image on it.
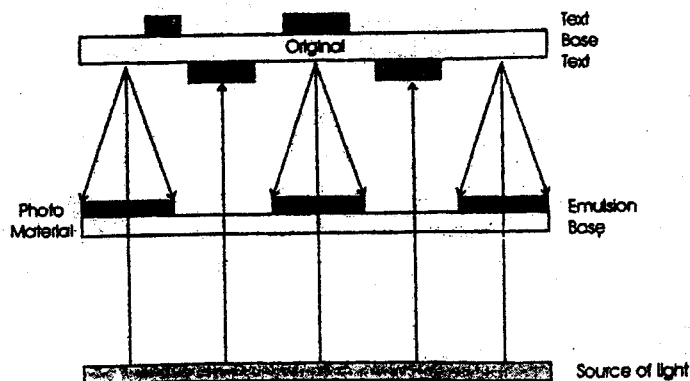
c)Optical Method
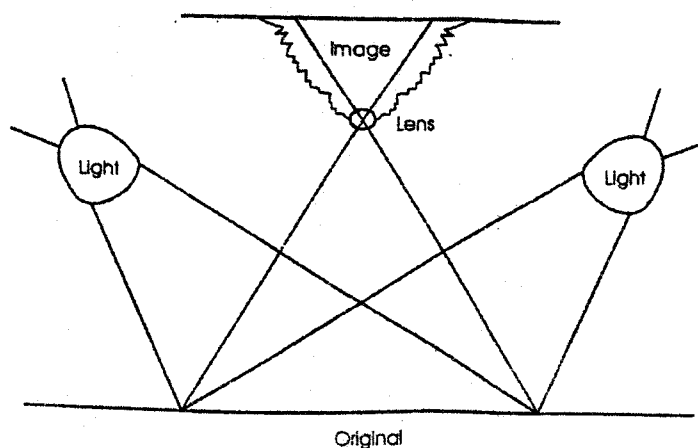
Original

In this optical method a camera is used which photographs, the original through a lens to a sensitive film or paper or plate which is processed to serve as an intermediate. The final copy can be had from this intermediate either by contact or projection printing. There is not such problem as 'out of focus' with the optical copying system as the depth of the field of lens takes proper care of any unevenness in the original. The reproduction, in spite of the unevenness of the page is always in perfect focus it proper focusing has been done in the beginning.

2. Development process
a)   Silver Halide process
b)   Diazo process
c)   Thermographic process
d)   Xerographic process

a. Silver Halide Process

In this process silver grains with sensitizing dyes are suspended in a gelatin emulsion on which is coated on some base. This coating is exposed to light either in contact with the original as in the direct contact or contact reflex method. The silver halide grains are affected by the light in direct proportion to the quantity received. This results into a latent image. In order to make the image visible the coating on the base is treated in a solution of chemicals known as a DEVELOPER. The developer changes the exposed silver grains into black metallic silver and gives the negative of the original in which the white background appears black and black text appears white. The negative is treated in acidic solution; this negative is then treated in a 'flexer' so that the image is not made permanent. Washing of the negative in fresh water follows the fixing process. So that the remaining chemicals are removed. After thorough washing, the negative is dried.

b. Diazo process

This process depends on THE FACT THAT DIAZONIUM SALTS react with some organic compounds known as colour couplers, to give a zodyes. And if diazonium salts are

exposed to ultra-violet radiation light, they are decomosed to give a colourless product, which is not fit for forming a dye. In the diazo process, the diazonium salt and the dye-forming agent or coupler is coated on the paper and to prevent their reaction with each other before exposure on acid called as stapler is added. After the exposure has been made through the master to be copied, development in the dry process is carried out by passing the diazo coated paper through out anmonia solution. The ammonia which is alkaline neutralises the acid in the coating and allows the diazonium compound to react with the coupler to from the dye image. The colour that can be commonly, obtained are blue, black and red.

Thermo fax process

In this process a special neat sensitive thin paper is used, this paper with its wax in contact with the original is exposed to INFRARED RAY PASS through the paper, without affecting it, strike the original where they are absorbed by the cerbon and metallic contents of the text and neat it up to the temperature which is sufficient to set in a chemical action in the special paper resulting into the coloured image of the text.

Xerographic process

1. Surface of specially coated plate, is being electrically charged as it passes under wires.
2. Shows coating of plate charged with positive electricity.
3. Copy is protected through lens in camera plus mark show-projected image with positive charges. Positive charges disappear in areas exposed in light as shown by white space.
1. A negatively charges powdered adheres to positively charged image.
5. After powder treatment, a sheet of paper is placed over plate and receives positive charge.
6. Positively charged paper attracts powder from plate forming direct positive image
7. Print is heated for a few seconds to fuse power to form the permanent print.

Reprographic Services in India INSDOC

INSDOC has adequate facilities for microfilming, photocopying and slide making. The centre also under takes microfilming of old documents to help institutions in storage and archival keeping.

DESIDOC

DESIDOC provides reprographic services including photography, Xeroxing, Colour side preparation, slide projection and microfilming facilities to local labs.

Conclusion

The enormous rate at which published and unpublished documentary information is growing makes it impossible physically or economically. For the individual user of the institution, however, big to have access to all the material available and it is here that reprography comes no aid.

UNIT - V

7.Bibliography-Concept, Definition, Needs and Purpose, Types, Reference Values, Examples.

Layout
1. Introduction
2. Definition
3. Types
4. Functions
5. INB
6. BNB

Introduction

Bibliography gives vast amount of information for as scholars and students and it gives up to date information. Now a days the need to have bibliography is very important because it enables to find out what has already been written on the subject.

Definition

Bibliography is defined as "a list of books of a particular authors, printer or country are of those dealing with any particular theme, the literature of subject. The word bibliography originated from two Greek words "Biblio" and Graphian" Biblio means books:, Graphian " means to write".

Types of Bibliography
a)   Enumerative Bibliography or systematic Bibliography
b)   Analytical Bibliography and
c)   Historical Bibliography

Enumerative Bibliography

Its otherwise called as systematic bibliography. It enlists detail of groups of books, which have some aspects in common.
E.g.:- Bibliography on Rural industries Types of systematic bibliography.

Commonly recognized types of systematic bibliography are given below
* In curable or back rarities bibliography
* General or Universal Bibliography
* National bibliography
    Selective or elective bibliography
    Trade bibliography
    Subject Bibliography
    Author bibliography or Bio-Bibliography
    Bibliography of Bibliographies

Analytical Bibliography

It deals with the physical format through which the contents are presented. It provides physical description of the reading materials in addition to the usual bibliographic details.

Historical Bibliography

It looks at books itself and its history to assess its influence in the social and cultural developments of a country.

Functions of Bibliography

It helps to

1) Verify individual titles
2) Know the documents available under a particular subject
3) Know the other reading materials available on a particular subject
4) Works govern by a author and information on a complete work by un individual author.
5) Find out the basic and best books in the specific subject.
6) Applies the books through the critical and evaluative reviews
7) Know the authors name, complete title of the work, place of publication date of publication, edition, page, price, etc.
8) Find out works grouped according to form location and period.

Indian National Bibliography - (INB)

The Indian National is a classified record of current publications published in India, is based on publications deposited at the National Library, Calcutta under the delivery books act of 1954. First INB appeared as a experimental fact era in 1957 and subsequently cumulated in annual volumes, Now INB is brought out monthly and then cumulated in annual volumes.

The following items are not included in INB.

1. Maps
2. Musical Scores
3. Periodical Publication
4. Keys and guide to text book and
5. Exphemeral material

INB is a subject list of books published in India in Assume, Bengali, English, Kannada, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Tamil, Telugu, Urdu and more than 15 languages in India.

First issue of INB was published in two parts namely,

Part I   - General publications

Part II - Containing Official publications and with two sections each. In 1973 the two papers have been amalgamated and now is published in 2 sections namely.

i) Classified   ii) Alphabetical

Classified Sections

Entries have been arranged by subject according to DDC & CC numbers are arranged at the right hand bottom corner of each entry.

Each entry gives the class number authors name in full, title, place of publication, publishers, name, year of publications, pages nature of illustrations if any, nature of binding, price, series note and annotations. Names of authors and titles of books in Indian Languages are translated into Roman script with diacritical means and then arranged in alphabetical orders under each class. The language of the book is denoted by the symbols at the left hand bottom corner of each entry.

INB Records all publications is regional languages in Roman script. But most of Indian readers do not recognize the Roman Script and there fore cannot benefit from INB. Small libraries cannot affect to buy INB therefore separate annual bibliographies for each of the Indian languages in their respective scripts are issued. But they are not issued regularly.

BNB
Introduction
Bibliography in simple term "About the books". A bibliography is a component of a larger communication system where the objective is the transfer of information. In other words it is defined as "Organised list of primary or other sources relating to a given subject or person".

The word bibliography is derived from the 2 Greek words "Biblion" and "Graphien". • Biblion means 'Books' and graphein is 'to write'. Thus etymologically bibliography means 'writing of books'.

BNB
It is published by council of British National Bibliography in 1950.
Authority
It consists of copyright is given to the Department of the British Museum, Library Association, Publishers and Book sellers Association, ASLIB, UNESCO and others. British Museum copyright Department has copyright Act news, books and serials are deposited.
Frequency
It comes as a weekly, monthly, quarterly, half yearly and annually published since 1950.
Scope
It lists all the books published in British Island. They Exclude periodicals, Music, Maps, publications of government, publications without British imprint, cheap Novelties, unchanged reprints, which are not required to be deposited under the copyright Act.
Arrangement
Each issue has 2 parts
1. Classified Part
2. Alphabetical part.
The entries are arranged according to Dewey Decimal Classification (DDC).
Items of Information
Each Main entry is a classified part giving authors name, full title, edition number, name of publication, number of pages, price, nature of illustration, size, nature of binding, series, BNB serial number, ISBN and sometimes annotation.
e.g.   646.7 -   Management of personal and family grooming
646.72 -   Women Beauty Care.
Index
Under alphabetical part they are 3 parts.
1. Title index

1. Author index
2. Subject index

The subject index gives the full Bibliographic Titles included.

The author index gives the author name, cross-reference of cumulated index.

Special Features

Since computers are used for production. The time lag is reduced. This is accurate and comprehensive source of British Bibliographic Information.

Code No: 4345   Sub.Code: DBL1B

B.L.I.S.C. DEGREE EXAMINATION
APRIL 2010

LIBRARY AND INFORMATION SCIENCE

Paper – II
INFORMATION SOURCES AND SERVICES
(For those who joined in July 1999 onwards)

Time: 3 hours   **Max.Marks: 75**

Answer any FIVE questions
All questions carry EQUAL marks

(5*5=75 Marks)

1. Define Reference Sources. Examine the criteria for evaluating Reference Sources.
2. Explain the need and purpose of user Education in a College Library.
3. What is a Long Range Reference Service? State its need and importance in Special Libraries.
4. Define Current Awareness Service. Explain the various forms of CAS.
5. Define Reprography. Discuse the various Reprographic services available in India.
6. Explain in detail the various types of Bibliographies.

7. Define Search Strategy. Explain on line searching.
8. Critically evaluate "McGraw-Hill Encyclopedia of Science and Technology"
9. Write short notes on any THREE of the following:

   (a) Primary Sources of Information
   (b) User needs in College Libraries
   (c) Ready Reference Service
   (d) SDI
   (e) Indexing Services   _____