# **University of Mysore Department Studies in Library and Information Science**

M.L.I.Sc. Revised Syllabus for Choice Based Credit System (CBCS) (w.e.f. 2012)

# **First Semester**

Sl. No.	Code	Code Title of the Paper	Cred	Credit Pattern in		
			L	T	P	Value
		Hard Core				
1		Library, Information and Society	3	1	0	4
2		Information Sources	3	1	0	4
3		Information Processing: Cataloguing-I	2	1	0	3
4		Information Processing: Classification-I	2	1	0	3
		Soft Core				
1		Information Processing: Cataloguing - II	0	1	3	4
2		Information Processing: Classification - II	0	1	3	4
3		Personality Development & Communication Skills	1	1	0	2

# **Second Semester**

Sl. No.	Code	Title of the Paper	Credit Pattern in			Credit Value
			L	T	P	value
		Hard Core		<u> </u>		
1		Management of Libraries and Information Centers	3	1	0	4
2		Fundamentals of Information Technology	3	1	0	4
3		Information Processing: Cataloguing - III	0	1	2	3
4		Information processing: Classification - III	0	1	2	3
L		Soft Core		l	ı	ı
1		Public Libraries and Information Centers	3	1	0	4
2		Academic Libraries and Information Centers	3	1	0	4
3		Industrial Libraries and Information Centers	3	1	0	4

4	Bio-Medical Libraries and Information Centers	3	1	0	4		
5	Corporate Libraries and Information Centers	3	1	0	4		
Open Elective							
1	E-Publishing	3	1	0	4		
2	Digital Information Management	3	1	0	4		

# **Third Semester**

Sl. No.	Code	Title of the Paper	Credit Pattern in			Credit Value
			L	T	P	, varue
L		Hard Core		<u>I</u>		<u>I</u>
1		Information Retrieval	3	1	0	4
2		Library Automation and Networks	3	1	0	4
3		Library Automation Software	0	1	3	4
		Soft Core				
1		Marketing of Information Products and Services	3	1	0	4
2		Conservation and Preservation of Information Resources	3	1	0	4
3		Users and User Studies	3	1	0	4
		Open Elective	ı	ı	ı	
1		Web 2.0	3	1	0	4
2		Electronic Information Sources and Services	3	1	0	4

# Fourth Semester

Sl. No.	Code	Title of the Paper	Credit Pattern in			Credit Value
			L	T	P	
		Hard Core				
1		Information Systems and Services	3	1	0	4
2		Research Methodology	3	1	0	4
3		Digital Libraries and E-publishing	3	1	0	4

Soft Core								
1	Digital Library Software	0	1	3	4			
2	Webometrics, Informetrics & Scientometrics	3	1	0	4			
3	Project Work / Dissertation	0	1	3	4			
	Open Elective							
1	Scholarly Communication	3	1	0	4			
2	Information Literacy	3	1	0	4			
3	Content Management Systems	3	1	0	4			

Note: Seminars, Case Study, Discussion and Round Tables etc., are all part of Tutorials

# **First Semester**

# **Hard Core**

# Library, Information and Society

# Unit -1

- Social and historical foundations of Library: Library as an institution and its evolution, Library as a socio and cultural institution.
- History of Libraries.
- Library movement in India.
- Different types of Libraries functions, objectives, and activities.
- Role of Library in formal and informal education.

#### Unit -2

- Definitions and notions of Information. Contributions of Belkin, Robertson, Derwin, Ingwersen, etc.
- DIKW model (Data- Information- Knowledge-Wisdom).
- Information, Information Science, Information society.
- Information as a resource/commodity.
- Information Transfer Cycle-Generation, Collection, Storage and dissemination.
- Role of Information in planning, Management, Socio-economic development, Technology transfer.
- Communication theories and models. Barriers to communication. Levels of communications Intrapersonal, interpersonal and mass communication.

# Unit -3

- Five laws of Library Science and their implications.
- Development of Libraries in India with special reference to Karnataka
- Library legislation Need and purpose. Library legislation in India problems and prospects.
- Overview of public Library acts in Indian States, Detailed study of Karnataka Public Library Act 1965.
- Delivery of Books (Public Libraries) and News paper Act, 1954 and 1956, Intellectual Property Rights (IPR) and Copyright Act, Right to Information Act.

# Unit - 4

- Library and Information Profession: Attributes of a profession, Librarianship as a profession, Professional ethics and qualities, Professional education and research.

- Professional associations Objectives and functions, Role of professional associations in Library development; Regional Library associations- KALA; National Library associations - ILA, IATLIS, IASLIC; International Library associations –IFLA, FID,ALA, SLA, and LA.
- Promoters of Library and Information services: National level RRRLF, International level UNESCO. Public relations and extension activities.
- National Knowledge Commission (NKC) and its role.

- Burahohan, A. (2000). Various aspects of librarianship and Information Science. New Delhi: ESS
  ESS.
- 2. Chapman, E.A. and Lynden, F.C. (2000). Advances in librarianship. 24<sup>th</sup> Vol. San Diego: Academic Press.
- 3. IFLA (1977). IFLA standards for Library service, 2<sup>nd</sup> Ed. Munich: Verlag.
- 4. Isaac, K.A. (2004). Library legislation in India: A critical and comparative study of state Library acts book description: New Delhi: Ess Ess Publication.
- 5. Khanna, J.K. (1987). Library and society. Kurukshetra: Research Publisher.
- 6. Kumar, P.S.G.(2003) Foundations of Library and Information Science. Paper I of UGC Model Curriculum. New Delhi: Manohar.
- 7. Kumar, P.S.G. (1997). Fundamentals of Information Science. Delhi: S. Chand.
- 8. Parekh, H. (2007) Five laws of Library Science: Continuing foundations in an Information society, DLIBCOM, 2(8-9), p.7-9.
- 9. Ranganathan, S.R. (1957). Five laws of Library Science. 2<sup>nd</sup> Ed., Bangalore: Sarada Ranganathan Endowment for Library Science.
- 10. Ranganathan, S.R. (1999). The Five Laws of Library Science, 2<sup>nd</sup> Ed., Bangalore: Sarada Ranganathan Endowment for Library Science.
- 11. Richard E.R. (2000). Foundations of Library and Information Science. Neal-Schuman.
- 12. Rout, R.K. Ed. (1999) Library legislation in India. New Delhi: Reliance.
- 13. Rudinow, J. & Graybosch, A. (2000). Ethics & Values in the Information Age. NY.
- 14. Sadhu, S.N. & Saraf, B.N. (1967). Library legislation in India. Delhi: Sagar, 1967.
- 15. Sen B.K. (2002). Five laws of Library Science? IASLIC Bulletin, 47(3), p.121-140.
- 16. Sharma, P. S.K.(1992). Library and society. 2 Ed. Delhi: ESS ESS.
- 17. Surendra S. & Sonal Singh. Ed. (2002).Library, Information and Science and society. New Delhi: ESS ESS.
- 18. Velaga V. & Madhusudhan, M. (2006). Public Library legislation in the new millennium: New Model Public Library Acts for the Union. Bookwell.
- 19. Venkatappaiah, V. (1990). Indian Library legislation. 2<sup>nd</sup> Vol. New Delhi: Daya.
- 20. Vyas, S.D. (1993). Library and society. Jaipur: Panchasheel.

# **Information Sources**

# Unit -1

- Information sources: Meaning, Definition, Nature, Evolution, Characteristics, Functions, Importance, and Criteria for evaluation.
- Types of sources ( Primary, Secondary & Tertiary (print and electronic), Human and Institutional sources)
- Primary sources- Structures and components journals; Patents; Technical Reports, Standards and Specifications; Conference proceedings; Trade literature; Theses and Dissertations.

# Unit -2

- Secondary sources- Dictionaries, Encyclopedias, Yearbooks and Almanacs, Biographical sources, Geographical sources, Bibliographical sources, Abstracting and Indexing periodicals, Handbooks and Manuals, Current sources, and Statistical Information sources.
- Tertiary sources Directories, Guides to reference sources, Bibliography of bibliographies,
   Monographs, Union Catalogues, Textbooks, etc.

#### Unit -3

- Human Sources: Technological gatekeepers, Invisible colleges, Information consultants, Experts/ Resource persons, Representatives of firms, Personal home pages, common men (priest, village head, postman, receptionist, etc.) and others.
- Institutional / Organisational Sources: Government, Ministries and departments, R& D organizations,
   Learned societies, Publishing houses, Press, Broadcasting stations, Museums, Archives, Data banks,
   Information analysis centers, Referral centers, Exhibitions & trade fairs. Institutional web sites, etc.

#### Unit -4

- Electronic sources: Internet Information resources, Databases (Bibliographic, Numeric and Full text). E-books, Open Access Resources. List servers, Subject gateways.
- Mini Project: Study of the features and functionality of any one source (E.g. Dictionary. com, Encyclopedia Britannica, Wikipedia, ACM digital Library, IEEE / IEE Electronic Library Online (IEL), Emerald, EBSCO, PsycINFO, Elsevier Science, PubMed Central, J-Gate, J-Store, Web of Science, SCOPUS, SciFinder Scholar, PLOS, DOAJ, RePEc, etc.)

# **Selected Readings:**

1. Alan P., Gwyneth T. and Goff S.(1999). The Library and Information Professional's Guide to the World Wide Web. London: Facet Publishing.

- 2. Chowdhruy, G. G. and Sudatta Chowdhury(2001). Searching CD-ROM and Online Information Sources. London: Facet Publishing.
- 3. Chowdhury, G. G. and Sudatta Chowdhury(2001). Information Sources and Searching on the World Wide Web. London: Facet Publishing.
- 4. Gopinath, M.A. (1984). Information Sources and Communication Media. Bangalore: DRTC.
- 5. Grogan, Dennis. (1984). Science & Technology: An introduction to literature, London: Clive Bingley.
- 6. Katz, W.A. (2000). Introduction to reference work, London: Butterworths. 2V.
- 7. Krishna Kumar (2003). Reference service, Ed.3, New Delhi: Vikas.
- 8. Kumar (PSG). Ed.(2001). Indian encyclopedia of Library and Information Science. New Delhi: S. Chand & Co.
- 9. Rao, I.K.R(2001). Electronic sources of Information. Bangalore: DRTC.s
- 10. Sewasingh (2001). Hand book of international sources on reference and Information. New Delhi: Crest Publication.
- 11. Sharma, J.S & Grover, D.R (1998). Reference service and sources of Information. New Delhi: ESS ESS.
- 12. Subramanayam, K. (1981). Scientific and technical Information resources. New York: Marcel Dekkar.
- 13. Walford, A.J. (1990). Guide to reference materials, London: Library Association, 3V.
- 14. http://www.Libraryspot.com
- 15. http://www.refdesk.com
- 16. http://www.infolibrarian.com

# **Information Processing: Cataloguing - I**

#### Unit-1

- Resource description: Concepts and definition. Library Catalogue: Meaning, Definition, Need, Purpose, Objectives and functions. History and development of Catalogue codes and practices:
- Resource description standards: ISBD, AACR2R and FRBR.

# Unit-2

- Physical forms and Inner forms of Catalogues.
- Kinds of entries (Card Catalogue to OPAC) their structure and uses. Filing rules and procedures.
- Subject Cataloguing: Design and construction, SLSH and LCSH.

#### Unit-3

- Normative principles of Cataloguing: Canons, Laws, Principles.
- Resource sharing of bibliographic data: Meaning and importance. Centralized Cataloguing, Cooperative Cataloguing, Cataloguing at Source, CIP, Union Catalogues,

#### Unit-4

- Current developments: WebOPACs, and Z39.50,
- Metadata: Meaning, Definition, Purpose, Use and types. Metadata standards: MARC-21 & Dublin Core. TEI (Text Encoding initiative), METS, TEI, EAD VRA Core etc.
- Consortia approach to metadata- OAI-PMH.

# **Selected Readings:**

- 1. Anglo American Cataloguing Rules (2002). 2<sup>nd</sup> Ed. Rev. New Delhi: Oxford.
- 2. Barbara, MW., Ed. (1997). Sears List of Subject Headings, New York: HW Wilson.
- 3. Byrne, D. J.(1998). MARC manual: Understanding and records. Chicago: ACA.
- 4. Maxwell, R.L. and Connell, T.H. Eds. (2000). Future of Cataloguing. Chicago: ALA.
- 5. Maxwell, R. and Maxwell, M.F. (1997).Maxwell's handbook of AACR2R: Explaining and illustrating the Anglo American Cataloguing Rules and the 1993 amendments. Chicago: ACA.
- 6. Ramalingam, M. S. (2000). Library Cataloguing and Classification systems. Delhi: Kalpaz.
- 7. Ranganathan, S. R. (1955). Headings and canons. Madras: S Vishwanathan.
- 8. Ranganathan, S. R. (1998). Classified Catalogue code. Madras: UBSPD.
- 9. Ranganathan, S R. (1950). Library Catalogue: Fundamentals and procedures. Madras: LA.

# **Information Processing: Classification - I**

#### Unit -1

- Classification Meaning, Definition.
- Library Classification Definitions, Need, Purpose and Functions. Understanding the developments in theory of Library Classification. Study of the contributions of E.C. Richardson, H.E. Bliss, W.C. Berwick Sayer, J.D. Brown, E.W. Hulme, CRG, and S.R. Ranganathan.
- Types of Classification schemes. Understanding the concept of and schemes in Knowledge Classification. Knowledge Classification vs. Library Classification. Understanding the Knowledge Classification Systems such as Vedic Classification, Greek Classification. General theory of Library Classification.

# Unit-2

- Normative Principles of Classification, Three planes of work. Canons, Principles and Postulates. Devices, Mnemonics. Five fundamental categories and Notation.
- Universe of subjects Concept, Definition, Structure, and Attributes of subjects. Spiral of Scientific Method; Modes of Formation of Subjects, Different types of subjects. Universe of Knowledge as mapped in different schemes of Classification. Call number and its structure.

# Unit 3

- Fundamental categories: Facet analysis and facet sequence, Phase relations, Common Isolates.
- Notational system: Meaning, need, functions and types, mnemonics, Hospitality in array and chain, Devices.
- Classification schemes: Standard schemes of Classifications and their features: CC, DDC, and UDC.
- Major contributions of Ranganathan to Classification theory.
- Design and development of schemes of Library Classification.

#### Unit 4

- Trends in Library Classification, Thesaurofacet, Classaurus, Automatic Classification, Classification in online systems, Web Dewey.
- Knowledge Organisation Systems: Concepts. Facet Ontologies, Folksanomies, OWL, SKOS. Taxonomies, Authority Files. Knowledge Organisation in Digital Environment

- 1. Berwick Sayers, W.C.(1950). Introduction to Library Classification. London: Andra dautch.
- 2. Chernyi, A.I.(1973). Introduction to Information retrieval theory. London: ASLIB.
- 3. Dhyani, P.(1998). Library Classification: Theory and practice. New Delhi: Vishwa Prakashan.
- 4. Jennifer, E. R.(1987). Organising knowledge: An introduction to Information retrieval. Aldershot: Gower.
- 5. Krishan Kumar (1980). Theory of Library Classification, 2 Ed. New Delhi: Vikas.
- 6. Parkhi, R.S. (1977). Library Classification: Evolution of a dynamic theory. Bombay: Asia.
- 7. Kumar, P.S.G.(2003). Knowledge organization, Information processing and retrieval theory. Delhi: BR.
- 8. Ranganathan, S.R. (1960).Colon Classification, 6<sup>th</sup> ed. Bangalore: Sarada Ranganathan Endowment for Library Science.
- 9. Ranganathan, S.R. (1957 &1965). Prolegomena to Library Classification, Ed2, London: LA.
- 10. Ranganathan, S.R. (1999). The five laws of Library Science. Bangalore: Sarada Ranganathan Endowment for Library Science.

- 11. Rijsbergen, C.J. V.(1070). Information retrieval, 2<sup>nd</sup> ed., London: Butterworths.
- 12. Sinha, S.C. & Dhiman, A.K.(2002). Prolegomena to universe of knowledge. New Delhi: ESS ESS.
- 13. Srivastava, A.P.(1993). Theory of knowledge Classification in Libraries. New Delhi: Sage.

# **Soft Core**

# **Information Processing: Cataloguing -II**

Cataloguing of simple documents according to AACR2R, 2002/RDA and assign subject headings using at least one standard list of subject headings.

#### Unit -1

- Cataloguing of single author and joint authored books.

# Unit -2

- Cataloguing of edited books, multivolume books, and pseudonymous authors.

#### Unit -3

- Cataloguing of uniform titles and serials publications.

#### Unit -4

- Cataloguing of corporate authors: Government publications, Institutional publications, Society publications, Conference/Seminar proceedings, workshop materials etc.

# **Selected Readings:**

- 1. Anglo American Cataloguing Rules (2002). 2<sup>nd</sup> Ed. Rev. New Delhi: Oxford
- 2. MARC 21 and Related standards for Bibliographic Records. New York: LC.

# **Information Processing: Classification – II**

Classify the documents according to Dewey Decimal Classification (Latest edition)

#### Unit -1

- Classification of documents representing simple subjects.

#### Unit -2

Classification of documents with standard subdivisions.

# Unit -3

- Classification of documents representing compound subjects

#### Unit -4

- Classification of documents representing complex subjects.
- Assignment of Book Number

# **Selected Readings:**

- 1. Raju., A.A.N. (1985). Universal decimal and colon Classification.
- 2. Chan, Lois Mai and others: Dewey Decimal Classification. A practical guide. 2<sup>nd</sup> Ed. Albany, New York: OCLC.
- 3. Satija, M.P. and Comaromi, J.P.(1998). Exercises in the 21st Edition of Dewey Decimal Classification. New Delhi: Concept.
- 4. Latest Edition of Dewy Decimal Classification.

# **Personality Development & Communication Skills**

#### Unit 1

 Understanding self – 'Know yourself'. Personality types – Four temperaments and personality. MBTI. Understanding personal strengths and weaknesses. Emotional Intelligence and competence. Stress management. Time management.

#### Unit 2

- Communication skills Effective speaking. Improving vocabulary and grammar. Elements of effective speaking. Types of speaking Briefing, teaching, lectures, speeches and others.
- Stages in the preparation understanding the audience, audience analysis, subject , gathering materials, evaluating materials, presenting a talk, and other processes . Non-verbal communication and body language

# Unit 3

- Writing skills. Principles of presentation of ideas. Techniques, skills and tools for effective writing.

#### Unit 4

- Work and organisation psychology. Leadership and working in teams. Working collaboratively. Working and sharing knowledge and experience. Team development.

 Meetings and negotiation skills. Different types of meetings including video conferencing, conference calls. Conducting a meeting. Getting the best out of negotiation. Negotiation strategies.

# **Selected Readings:**

- 1. Gladis, S. D. (1993). Write type, personality types and writing styles. Amherst, Mass.: Human Resource Development Press.
- 2. Gupta, S. (2009). Personality development and communication skills. Jaipur, India: Book Enclave.
- 3. Karten, N. (2010). Presentation skills for technical professionals achieving excellence. Ely: IT Governance Publications.
- 4. Masters, L. A., Wallace, H. R., & Harwood, L. (2011). Personal development for life and work (10th ed.). Australia: South-Western Carnage Learning.
- 5. McMurry, J. H. (2002). The etiquette advantage: personal skills for social success. Wilmington, NC: Stellar Publications.

# **Second Semester**

# **Hard Core**

# **Management of Libraries and Information Centres**

#### Unit -1

 Management – meaning and definitions. Role, functions and principles of management. Schools of thought in management. Levels of management. Functions and principles of management;
 Application to Library and Information Centres. Organisational structure.

#### Unit -2

- Different functional units of Library and Information centre.
  - Acquisitions section: Functions and procedures.
  - Technical section: Functions and procedures.
  - Circulation section: Functions. Methods of charging and discharging systems.
  - Periodical section and its functions and activities.
  - Reference and customer care service.

#### Unit -3

Collection development – Book selection policies and principles for print and electronic resources.
 Problems of Collection development for print and electronic resources (including licensing). Online
 Bookstores – Identification, Advantages. Online book shops Vs. Traditional book shops. URLs.

- Collection management: Stock rectification. Weeding of resources. Conservation and preservation of Library resources.
- Financial and records management. Importance. Sources of finance. Mobilisation of financial resources. Budgeting methods and techniques. Budgetary Control, Cost effectiveness and Cost benefit analysis (PERT & CPM), Out sourcing.

# Unit -4

- Human Resource Management: Job Analysis and Description, Job Evaluation; Inter-personal Relations; Staff selection and recruitment; Motivation, Delegation, Decision Making; Education, Training and Development; Job evaluation and Performance Appraisal; Leadership Qualities.
- Library Buildings and Equipments.
- Performance Evaluation of Library and Information Centres,
- Total Quality Management (TQM).
- Library committee. Library rules and regulations. Library statistics. Annual reports.

- 1. Beardwell, I. & Holden, L. Ed.(1996). Human resource management: Contemporary perspective. New Delhi: McMillan.
- 2. Bratton, J. and Gold, J. (1994). Human resource management: Theory and practice. Basingstoke: Mac Millan.
- 3. Brophy, P. and Courling K.(1997). Quality management for Information and Library managers. Bombay: Jaico.
- 4. Bryson, J.O. (1996). Effective Library and Information management. Bombay: Jaico.
- 5. Edward, E. G.(1982). Techniques for librarians. NY: Academic,
- 6. Evans, E.G. Ed.(1986). Management Information systems. New Delhi: S. Chand & Co.
- 7. IASLIC (1979). Application of management techniques in Library and Information systems. (Conference Papers). Kolkata: IASLIC.
- 8. Katz, W.A.(1980). Collection development selection of materials for Libraries. New York: HRW.
- 9. Krishna Kumar (1987). Library administration and management. Delhi: Viaks.
- 10. Kumar, P.S.G. (2003). Management of Library and Information Centres. Delhi: B. R. Publishing corporation.
- 11. Mahapatra, P.(1997). Library management. Calcutta: World Press.
- 12. Mittal, R.L. (1984). Library administration: Theory and practice. 4 Ed. New Delhi: Metropolitan.
- 13. Paliwal, P.K. (2000). Compendium of Library administration. New Delhi: ESS ESS.
- 14. Paranjpe, V. (1997). Strategic human resource management. New Delhi: Allied.

- Parker, C. and Café, T.(1993). Management Information systems: Strategy and action. New York: McGraw Hill.
- 16. Pearson, R.J. Ed.(1983). Management process: Selection of readings for librarians. Chicago: ALA.
- 17. Ranganathan, S.R. (1954). Library administration. Bangalore: Sharada Ranganathan Endowment for Library Science.
- 18. Siwatch, A. S.(2004). Library management: Leadership style strategies and organizational climate. New Delhi: Shree.
- 19. Stuert, R.D. and Moran, B.B.(2004). Library and Information center management. Colorado: Libraries unlimited.

# **Fundamentals of Information Technology**

#### Unit 1

- Information Technology Concepts, Definition, Components and applications
- Historical developments, Characteristics, Applications, Generations and Classification of computer.
- Components of a computer: Central Processing Unit, Input and Output devices, Internal and external storage devices.

# Unit 2

Data representation in computers: Number systems, Binary numbers: Binary addition (1's and 2's complement methods), Subtraction, Multiplication and Division. Representation of integers, Fractions. Character encoding standards – ASCII, EBCDIC, ISCII and UNICODE. Issues with respect to character collation and sorting.

#### Unit 3

- Computer software: Types and categories
- Programming concepts: system analysis, algorithms and flow charts, Open source and proprietary software.
- System software: Purpose, Operating systems; MS-DOS, Microsoft Windows, UNIX, Linux,...
- Application software: Word processors, Spreadsheets, Presentation packages and Database Management Systems, Internet browsers, Software suites, Anti-virus programs, Sharewares, Web design tools, HTML Editors.
- File organization: Sequential, Indexed Sequential and Direct file.

- Fundamentals of Telecommunication Concepts, Data transmission, Signals, Media, Modes and Devices. Computer network: Types, and Topologies. Internet: Evolution, Importance and applications. WWW.
- Electronic publishing- Micro graphics, Videotext, Teletex and Visual data display Systems.

- 1. Arvind Kumar. Ed.(2006). Information technology for all (2 vols.). New Delhi: Anmol.
- 2. Bansal, S.K.(2005). Information technology and globalisation, New Delhi: A.P.H. Publishing corporation.
- 3. Basandra, S.K(2002). Computers today, New Delhi: Golgotia.
- 4. Carter, R.(1987). The Information technology hand book, London: Heinemann.
- 5. Croucher, P.(1996). Communications and networks. 2nd ed. New Delhi: Affiliated East West.
- 6. Curtin, D.P. & others: Information technology: The breaking wave. New Delhi: TMH, Latest Edition.
- 7. Decson, E.(2000). Managing with Information technology. Great Britan: Koganpage Ltd.
- 8. Dhiman, A.K.(2003). Basics of Information technology for librarians and Information scientists, Vol.1. New Delhi: ESS ESS.
- 9. Forrester W.H. and Rowlands, J.L.(2002). The online searcher's companion. London: LA.
- 10. Gupta, V. (2005). Rapidix computer course. New Delhi: Pustak Mahal.
- 11. Hunter & Shelly(2002). Computers and common sense, New Delhi:s Prentice-Hall.
- 12. Jain, V.K.(1994). O Level Module I: Computer fundamentals. Delhi: BPB Publications.
- 13. Johri, A. & Jauhari, B.S. (1993). Computers today. Vol.1, Mumbai: Himalaya.
- 14. Kashyap, M.M. (2003). Database systems. New Delhi: Vikas.
- 15. Keren, C & Perlmutter, L,Ed.(1995). The application of mini and micro computers inInformation, documentation, and Libraries. Amsterdam: Elsevier.
- 16. Rajaraman, V. (1995). Fundamentals of Computes. New Delhi: PHI, 1995.
- 17. Rowely, J. (2001). Information systems, 2 Ed. London: Clive Bingley.
- 18. Satish Jain. Information Technology: `O' Level made Simple. New Delhi: BPB, Latest Edition (All modules).
- 19. Satyanarayana, R. (2005).Information technology and its facets. Delhi: Manak.
- 20. Saxena, S.(2001). A first course in computers. New Delhi: Vikas pub. House.
- 21. Sinha, P.K.(1992). Computer fundamentals: concept, systems and applications. 2nd ed. NewDelhi: BPB Publications, 1992.
- 22. Shrivastave, R.K.(2001). A: Text book of Information technology, Delhi: Dominant publishers.

- 23. Shroff, R.(2000). Computer systems and applications, Mumbai: Himalaya, 2000.
- 24. Williams, B, Sawyer, S. & Hutchinson, S.E. Using Information technology: A practical Introduction to computers and Communication. New Delhi:TMH, (latest edition)

# **Information Processing: Cataloguing-III**

Cataloguing of non-book materials according to AACR2R/RDA and creating records using MARC21 and Dublin Core.

#### Unit 1

- Cataloguing of cartographic, microforms, sound recordings, motion pictures, video recordings and electronic resources by using the latest edition of AACR/RDA:

# Unit 2

- Creating MARC21 records for simple print documents.
- Creating MARC21 records for simple electronic resources.
- Creating MARC21 records for complex documents print and e-resources.

#### Unit 3

Preparing Simple and Qualified Dublin Core records in HTML.

#### Unit 4

- Preparing Simple and Qualified Dublin Core records in XML.
- Preparing Simple and Qualified Dublin Core records in RDF.

# **Selected Readings:**

- 1. Anglo-American Cataloguing Rules (2002) 2<sup>nd</sup> Rev Ed.
- 2. MARC 21 and Related standards for Bibliographic Records. New York: LC.
- http://dublincore.org

# **Information Processing: Classification – III**

Classify the documents according to Universal Decimal Classification (Latest edition)

#### Unit 1

- Classification of simple documents.

# Unit 2

- Classification of documents using common auxiliary tables.

- Classification of documents using special auxiliary tables.

#### Unit 4

- Classification of complex documents.

# **Selected Readings:**

- 1. Raju., A.A.N. (1985). Universal decimal and colon Classification.
- 2. Sehgal, R.L. An Introduction to Universal Decimal Classification, New Delhi: K.K. Publications
- 3. Universal Decimal Classification. Medium English Edition. 2 Vols.

# **Soft Core**

#### **Public Libraries and Information Centers**

#### Unit-1

- Meaning and definition, origin, objectives, and functions of Public Libraries, History and Development of Public Libraries in India and other countries. Role of Public Libraries in 21st century. Role of government and non-government agencies in the development of public Libraries. Role of public Library in literacy and mass education. Public Library users.

#### Unit-2

- Public Library Finance and Budgeting: Source of public Library finance, Administration of Budget.
- Study of public Library legislation: Need and importance. An overview of Public Library Acts in UK, USA, and other countries. Public Library Acts in different states with emphasis on Karnataka State Public Library Act, 1965.

#### Unit-3

- Public Library Services: Planning and Organization of various types of Information services to the
  different categories of users including the physically and mentally challenged persons and special
  groups: women and children. Rural Library Services; Need and importance; Library users in rural
  areas. Library services to rural public.
- Library publicity, exhibition, seminar, book talks, A.V. programs; Mobile Library Services; user awareness programmes. Outreach activities.

# Unit – 4

Role of national and international associations and organizations in the promotion of public Libraries.

Raja Ram Mohan Roy Library Foundation, UNESCO, IFLA etc. Internet Public Library (http://www.ipl.org).

#### **Selected Readings:**

- 1. Atman, E. Ed. (1980). Local Library administration in association with International City Management Association. 2<sup>nd</sup> Ed. Chicago: ALA.
- 2. Penna, C.A. et.al. (1977). National Library and Information services, handbook for planners. London: Butterworths.
- 3. Mittal, R.L. (1971). Public Library law. Delhi: Metropolitan.
- 4. American Library Association(1966). Minimum standards for public Library system. Chicago: ALA.
- 5. White, Carl M. Ed.(1964). Bases of modern librarianship. New York: Pergmon.
- 6. Kesavan, B.S., (1961). National Library of India, Calcutta: National Library.
- 7. Great Britain, Ministry of Education (1959). Standards of public Library services in England and Wales. Report. London: HMSO.
- 8. Esdails, A. (1957). National Libraries of the world. London: Library Association.
- 9. McCloven, L.R. (1951). Public Library extension, Paris. UNESCO.
- 10. Ranganathan, S.R. (1950). Library development plan: A 30 year programme for India with draft Library bill, Delhi: Delhi University.
- 11. McCloven, L.R., (1942). Public Library system of Great Britain: Report on its present conditions with proposals for reorganization. London: Library Association.

#### **Academic Libraries and Information Centers**

#### Unit-1

- Academic Libraries. Meaning, Objectives and Functions. Types of academic Libraries. Role of UGC in academic Library development.
- Collection development and collection management Book selection principles and policies, procedures and problems.

#### Unit -2

Academic Library services: Virtual Reference Services, Documentation and Information services,
 Current awareness services, SDI services. Abstracting and Indexing services, Information product development services, ILL document delivery services. Literature survey and bibliography.

- Academic Library Finance and Budgeting.
- Human Resource Management.
- Library Buildings and Equipments.

#### Unit 4

- Academic Library networks. Library co-operations: Resource sharing, networks and consortia.
   International and National scenario. Academic networks: INFLIBNET and its services and activities.
   OCLC Its activates and functions.
- Institutional repositories: Meaning, definitions, need, and benefits. Overview of IR projects. IR software.

- 1. Bavakutty, M,(1986). College Libraries in India, Vol.7: A case study, West Yorkshire: MCB University press.
- 2. Bavakutty, M.(1988). Libraries in higher education. New Delhi: ESS ESS.
- 3. Cowley, John. (1982). Personnel management in Libraries.
- 4. Gelfand, M.A., ([1968]). University Libraries for developing countries. [Paris]: Unesco
- 5. Henry, M and Morgan, S. (2002). Practical strategies for modern academic Library. London: Aslib-IMI.
- 6. Isaac, D. et.al. (1993). Academic Libraries: Role in the national development.
- 7. Jenkins C. and Mary M., (1996). Collection development in academic Libraries.
- 8. Mathu, M.V. and Arora, R.K. Indian University Library System revitalization.
- 9. Rachel Applegate(2010). Managing the small college library. Santa Barbara, Calif.: Libraries Unlimited.
- 10. Saini, (1976). Library organisation for higher education.
- 11. Sewa Singh and Arora, M. Handbook of college Libraries: Problems, finance and related aspects.
- 12. Srivastava S.N. and Verma S.C., (1980). University Libraries in India. New Delhi: Vikas.
- 13. Trehan, G.L., (1985). College Library development.

# **Industrial Libraries and Information Centers**

#### Unit 1

The industry –Features, Objectives, Types and structure, Industrial policies, Industrial Information
and its impotence, Roles of industrial Libraries, Function and services Industrial Library.
Development of Library systems in different countries such as USA, UK and India. Industrial
Library users- Types, Need, User study and techniques. User education – Importance and
implications.

#### Unit 2

- Collection development policies and procedures. Management of industrial Library collection. Industrial Library Collection - Types, Features and procurement with special reference to parents and specifications; Standards and specifications and trade literature. Problems in collection development.

#### Unit 3

 Human Resource Management- Characteristic of personnel manager, Functional areas of personnel management, Personnel policies. Industrial Library personnel - Kinds, Qualifications, Duties and Responsibilities, Knowledge and skills. Selection and recruitment and performance. Training, Education and performance evaluation. Human Resource Development for management of industrial Information systems and services.

#### Unit 4

- Library and Information Services: Reference services, CAS and SDI services, Abstraction/condensation and Indexing service, Bibliographic service, Document supply service, Information product development service, and Marketing service, On-line Information service. Resource sharing and networking among industrial Libraries.
- Example of industrial Library networks in different countries. Activities and services if Industrial Support Organisations and Documentation Centers- INSDOC, SIDO, SENDOC, SISI, NISSAT, CSIR, UNIDO, WIPO, INPADOC, ICICI, IBID STPI, PERA. Chambers of Commerce and Industry. Professional organizations and associations, Research associations- ASLIB, IASLIC, KSIA, TECSOK. Case study of an industrial Library.

- 1. Ashworth, W. (1985). Handbook of special librarianship and Information work. 4the Ed. London: ASLIB.
- 2. Autherton, P.(1977). Handbook of Information systems and services. Paris: UNESCO.
- 3. Bakewell, K.G.B., (1969). Industrial Libraries throughout the world. Oxford: Pergaman.

- 4. Burket, J. (1968). Trends in special librarianship. London: Clive Bingly.
- 5. Chen, C. (1987). Scientific and Technical Information Sources. 2nd Ed. The MIT Press.
- 6. Claderhead, P. Ed.(1972)l. Libraries for professional practice. London: Architectural Press.
- 7. Conkling, T. W. & Musser, L.R Ed.(2002). Engineering Libraries: Building collections and delivering Services. Haworth Press.Krishan K. (1973). Research Libraries in the developing countries, Delhi: Vikas.
- 8. Hurt, C. D.(1998). Information sources in Science and technology. 3rd Ed. London: Libraries Unlimited.
- 9. Jackson, E.B., (1985). Special librarianship: A new reader. Metuchen: Scarecrow Press.
- 10. Lord, C. R. (2000). Guide to Information sources in engineering. London: Libraries Unlimited.
- 11. Macleod, R. A. & Corlett, J.(2005). (Ed.): Information sources in engineering (Guides to Information Sources). New Delhi: K.G.Saur Publications.
- 12. Malinowsky, H. R.(1994). Reference Sources in Science, engineering, medicine and agriculture. Oryx Press.
- 13. Mount, E. (1984). Management of scientific and technical Libraries. New York: Haworth.
- 14. Pruett, N.J. (1986). Scientific and Technical Libraries. 2vols. Orlando: Academic.
- 15. Singh, S.P and Krishan K.(2005). Special Libraries in the electronic environment. New Delhi: Bookwell.

#### **Bio-Medical Libraries and Information Centers**

#### Unit 1

- Introduction to health Science Libraries: Growth and development of health Science Libraries . Types of health Science Libraries/Information centres.
- Information services: Current Awareness Service, SDI service, Indexing and abstracting service, Literature search. Users of health Science Information.

# Unit 2

Health Science Information sources: Sources of Information - Print, Non-print and Electronic media,
 Institutional Sources of Information. Electronic Sources - e-journals, e-books, databases, Websites - identification, Selection and access. Open Access Sources

# Unit 3

- Health Science Information Institutions: National Medical Library. WHO. UNICEF, ICMR. Department of Biotechnology. Council of Ayurveda and Siddha. Council of Homeopathy. National Institute of Health and Family Welfare. CDRI. CFRI. CFTRI. NIN.NII. NIC

 Information Systems and Networks: HELLIS, MEDLARS, BIOSIS. Trends in Health Science Information System. Application of Hypertext, Hypermedia, Multimedia. Expert System and Artificial Intelligence- PubMed, Open access in Biomedical. Health Information Networks and Resource Sharing and Consortia approaches. HELINET Consortium, HeLLIS, Northeast Florida Health Information Consortium

#### **Selected Readings:**

- 1. Bakewell, K.G.B. ([1969]). Industrial libraries throughout the world. Oxford, New York, Pergamon Press.
- 2. Carmel, M Ed.(1995). Health care librarianship and Information work. 2<sup>nd</sup> Ed.. London: LA.
- 3. Dixit, R.P.(1995).Information management in Indian medical Libraries. New Delhi: New Concepts.
- 4. Gupta, S.P. & others (1993). Information technology and health Science Libraries. MLAI Special Publication.
- Malinowsky, H.R.(1994). Reference sources in Science, engineering, medicine and agriculture.
   Oryx Press.
- 6. Prudence W. Ed.(1993).: Library trends: Libraries and Information services in the health Sciences, Summer 1993. University of Illinois Graduate School.
- 7. Sasikala, C.(1994). Industrial library systems. New Delhi: Reliance Pub. House.
- 8. Wood, M.Sandra Ed. (1994). Reference and Information services in health Science Libraries. Scarecrow Press.

# **Corporate Libraries and Information Centers**

# Unit 1

- Introduction- Definition, Need, Nature and Functions of corporate Libraries and Information centers. Learning resources, Types of corporate Libraries and types of users and their Information need. Business school Libraries case analysis.

#### Unit 2

- Collection Development: Objectives and Purpose. Advantages of collection development planning, Implementation and evaluation. Book selection principles and policies, Procedures and problems. Information searching and access. Use of various search techniques

#### Unit 3

- Web based Information services, Corporate librarian 2.0 and Social networks- Blogs, Twitters, Face book, Google buzz etc. for communication. Information analysis and consolidation. Packaging and delivery.

- Corporate communications systems and tools-news letter. Bulletins, preparing for organizing events, Social talks, Conference, News briefs, Press releases, Editing, Reporting. Knowledge management in corporate Libraries.

# **Selected Readings:**

- 1. Bopp, R E., & Smith, L. C. (2011). Reference and Information services: An introduction, 4th Ed.. Santa Barbara, Calif.: Libraries Unlimited.
- 2. Campbell, M. J(1982). Business Information services: Some aspects of structure, organisation and problems. London: Clive Bingley
- 3. Gunningham, N. (2009). Corporate environmental responsibility. Farnham, Surrey, England: Ashgate.
- 4. Malone, S. A. (2003). How to set up and manage a corporate learning centre, 2. Ed.. Aldershot, Hampshire, England: Gower.
- 5. Matarazzo, J. M. (1999). Knowledge and special Libraries. Boston: Butterworth-Heinemann.
- 6. Mitchell, L. E. (2009). Corporate governance. Farnham, Surrey, England: Ashgate.
- 7. Moss, R. W(2003). Strauss's handbook of business Information: A guide for librarians, students and researchers. 2nd Ed. Santa Barbara, Calif.: Libraries Unlimited.
- 8. Taylor, A. and Farrel, S.(1994). Information management for business. London: ASLIB.
- 9. Thwaite, J. H.(1990). The Business Information maze: An essential guide. London: ASLIB.
- 10. Zaqorsky, J. L(2002). Business Information: Finding and using data in the digital age. McGraw-Hill/Irwin.
- 6. Bates, M. E., & Basch, R.(2003).Building and running a successful research business: A guide for the independent Information professional. Information Today, Inc.
- 7. Lavin, M. R., (2004). Business Information: How to Find It, How to Use It. 3rd Ed. Oryx Press.
- 8. Greasley, A. etal..(2002). Business Information systems: Technology, development and management for the E-Business. Financial Times Management.
- 9. Daniells, L. M., (1993). Business Information sources. 3rd Ed. University of California Press.

# **Open Elective**

# **E-Publishing**

# Unit-1

 Content: Types of content. Digital content types, File formats, Encoding systems ASCII, UNICODE and ISCII.

# Unit-2

- Markup Languages, SGML, HTML and XML.

#### Unit-3

 Page Description Languages: Adobe PDF and Photoshop. Legacy documents- Conversion from analog to digital, OCR Software and Adobe Capture.

#### Unit-4

- Electronic Publishing and scholarly communication, E-journals and e-books. Platforms, Standards and formats. DTP software. Delivery devices. Social, economic, and legal issues in electronic publishing. Use and usability issues. Economics of e-publishing. IPR and copyright issues.

# **Selected Readings:**

- 1. Karen S. W. Marilynn B, Stone, T. A. (2003). Electronic publishing: The definitive guide. UK: Hard Shell Word Factory.
- 2. Klostermann, D. (2011). The e-book handbook A thoroughly practical guide to formatting, publishing, marketing, and selling your e-book. Cambridge: Full Stop.
- 3. Loton, T. (2011). E-book publishing DIY: the do it yourself guide to publishing e-books, 2nd ed. United States: LOTONtech.
- Meckler, L. (2011). E-book formatting, self-publishing, marketing tips updated. USA: Linda E
  meckler on smash words.
- 5. Sahida, f. k. (2010). Publishing e-book for dummies. USA: CreateSpace .
- 6. Schuster, C. (2011). E-publishing for writers: Trends and opportunities/Fall 2011 (Kindle Edition ed.). UK: Books to Go Now .

# **Digital Information Management**

#### Unit 1

- Notion and Nature of Information: Data, Information, Knowledge and Wisdom. Information Life Cycle. Information explosion in modern world and need for Information organization.
- Introduction to digital Libraries. Electronic documents Files and file formats. Electronic Publishing and scholarly communication, Web 2.0 concepts and applications – Wikis, RSS, Blogs, Social book marking, Tags, Folksonomny, Meshups, Social Networking.

# Unit 2

- Search through general Search Engines, Search engines for scholarly literature, Meta Search Engines, Web Indexes, Advanced Search Techniques –Keyword search, Boolean operators,

- Proximity search, Phrase search, Field searching, concept searching, Wild Card search, Truncation, Searching of databases, Catalogues etc.
- Tools of Internet search: Local search. Vertical search. Search engine optimization. Search oriented architecture. Selection-based search. Social search. Document retrieval. Text mining. Web crawler. Multi search. Federated search. Search aggregator. Index/Web Indexing. Focused crawler. Spider trap. Robots exclusion standard. Distributed web crawling. Web archiving. Website mirroring software. Web search query. Voice search. Natural language search engines. Web query Classification. Image search. Video search engine. Semantic search.

- Protocols and standards: Z39.50. Search/Retrieve Web Service. Search/Retrieve via URL.
   OpenSearch. Representational State Transfer. Website Parse Template. Wide Area Information Servers. OAI/PMH.
- Practical component: Searching of databases, Catalogues. Searching in general search engines and meta search engines. Studying the searching features of the search engines. Searching Proquest, Pubmed, Emerald, EBSCO, JCCC.

#### Unit 4

 Technical Writing and Presentation –Tools, techniques and standards. Writing a technical paper, Making PPT. Foot notes and references. Study of citation style manuals- APA, MLA, and Chicago. Citation Machines, Automatic citation builder, Endnote, Refwork.

- 1. Alan S. P and Sarah S O. (2009). Technical writing 101: A real-world guide to planning and writing technical content. London: Scriptorium Publishing Services.
- 2. Chowdhury, G.G. and Chowdhury, Sudatta (2000). Searching CD-ROM and online Information sources. London: Library Association.
- 3. Chowdhury, G.G. and Chowdhury, Sudatta (2002). Introduction to digital Libraries. London: Facet publishing.
- 4. Chowdhury, G. (1999). Introduction to modern Information retrieval. London: Library Association.
- 5. Forrester, W.H. & Rowlands, J. L. (1999). The online searcher's companion. London: Library Association.
- 6. http://www.apastyle.org/
- 7. http://www.chicagomanualofstyle.org/
- 8. http://www.mla.org/style

- 9. Jennifer G., Gradiva C. (2011). Search engine optimization: An hour a day. London: John Wiley & Sons.
- 10. Karen S. W. Marilynn B, Stone, T. A. (2003). Electronic publishing: The definitive guide. UK: Hard Shell Word Factory.
- 11. Kenna, S. & Ross S. (1995). Networking in the humanities: Proceeding. Bowker-Saur, London.
- 12. Winship, I. & Alison, M. (2000). The student's guide to the Internet. London: Library Association.

# **Third Semester**

# **Hard Core**

# **Information Retrieval**

#### Unit 1

- Information Retrieval Systems: Basic concepts, Definitions, Objectives, Characteristics, Components and functions. Functional model of an IRS.
- Indexing Systems: Indexing Meaning, Purpose and Need. An overview of historical development in Indexing. Pre-coordinate Indexing Vs. Post-coordinate Indexing. Pre-coordinate Indexing systems - Brief outline of Chain procedure, POPSI, PRECIS and Keyword Indexing. Post-coordinate Indexing Systems - Uniterm Indexing. Citation Indexing - Meaning and importance, Different citation indexes: Shepard's Citations, SCI, SSCI. Automatic Indexing - Techniques and methods. Uncontrolled vocabularies.

#### Unit 2

Vocabulary Control: Vocabulary control – Meaning and importance; Controlled Vs. Free text
Indexing; Vocabulary control tools – Subject heading Lists, Thesauri, Thesaurofacet, Classarus.
Thesaurus construction techniques. Case Study of Controlled vocabularies/ Ontologies such, ERIC,
MeSH, INSPEC, UNESCO-IB, AgroVac, UMLS

#### Unit 3

- IR models. Concept of Ranking.: Structural models – Boolean Model, Probabilistic retrieval model, vector space model.

- Evaluation of IRS: Purpose; Evaluation criteria; Design of evaluation programmes; Steps of evaluation; Evaluation experiments: Overview of the Cranfield test, MEDLARS, the SMART Retrieval Experiment, The STAIRS project, TREC.
- Trends in IRS: Developments, Searching and retrieval, Full text retrieval, User interfaces, IR standards and protocols.

- A course in Information consolidation: a handbook for education and training in analysis, synthesis and repackaging of Information. General Information Programme and UNISIST, UNESCO, PGI, Paris. 1986.
- 2. Alberico, R. and Micco M.(1990). Expert systems for reference and Information retrieval. West Port: Meckler.
- 3. Atchison, J. & Alan G. A.(1072). Thesaurus construction: a practical manual. London: Aslib.
- 4. Atchison, J. & Gilchrist, A.(1972). Thesaurus construction: a practical manual. London: Aslib.
- 5. Austin, D.(1984). PRECIS: A manual of concept analysis and subject Indexing. 2<sup>nd</sup> ed.
- Chowdhruy, G.G.(2003). Introduction to modern Information retrieval. 2<sup>nd</sup> Ed. London, Facet Publishing.
- 7. Cleaveland, D. B.(2001). Introduction to Indexing and abstracting. 3<sup>rd</sup> Ed. Englewood, Colo. : Libraries Unlimited
- 8. Crawford, M. J.(1988). Information broking: a new career in Information work. London: LA.
- 9. Ford, N.(1991). Expert systems and artificial intelligence: An Information manager's guide. London: LA.
- 10. Ghosh, S.B. and Biswas, S.C. (1998). Subject Indexing systems: Concepts, methods and techniques. Rev. ed. Calcutta: IASLIC.
- 11. Lancaster, F. W. (1968). Information retrieval systems, characteristics, testing and evaluation. London: Facet Publishing.
- 12. Lancaster, F.W.(2003).Indexing and Abstracting in Theory and Practice. London: Facet Publishing.
- 13. Pandey, S.K. Ed.(2000). Library Information retrieval. New Delhi: Anmol.
- 14. Seetharama, S. (1997). Information consolidation and repackaging. New Delhi: ESS ESS.
- 15. Van, R.C. J.(1970). Information retrieval. 2<sup>nd</sup> ed. London: Butterworths.
- 16. Vickery, B.C.(1970). Techniques of Information retrieval. London: Butterworths

# **Library Automation and Networks**

#### Unit 1

- Library automation: Definition, Need, Purpose and Advantages. Historical development. Planning for Library automation.
- Automation of Library operations. Acquisitions, Cataloguing, OPACs, Circulation and Serials control.
- Evaluation of Library automation systems. Criteria for evaluation. Evaluation techniques. Study of standards relevant to Library automation.
- Application of Barcode and RFID Technology for Library Functions.
- Application of Artificial Intelligence to Library and Information Centres

#### Unit 2

- Network concepts: Meaning, and Definition. Digital and analogue signals, Modulation, Frequency, Spectrum, Bandwidth, Multiplexing (FDM, TDM, STDM, and WDM), Asynchronous and synchronous transmission, Transmission Modes Simplex, Half-duplex and Full duplex channels.
- Network devices: File server, Work station, Network Interface Unit, Transmission media, Hub, Repeater, Bridge, Router, Gateway, and Modem.
- Types of computer networks: Local Area Networks Concept, Topologies (Bus, Star, Mesh, Tree, and Ring). Wide Area Networks and Metropolitan Area Networks- Concepts, Circuit switching and Packet switching. Difference between LAN and WAN. Wireless Networks Mobile telephones.

# Unit 3

- Network architectures. OSI and TCP/IP Reference models.
- Internet Technologies: Internet-History and development. World Wide Web (WWW).
- Protocols and its functions. Understanding TCP/IP.
- Network Security Issues and Measures: Understanding the following issues in Network security-Security requirements and attacks, Confidentiality with conventional encryption, Message authentication and hash functions, Public-key encryption and digital signatures. Fire walls and anti- virus software.

# Unit 4

- Historical Developments of Library Cooperation and Networking.
- Library Networks: Study of the functions and activities of OCLC, RLIN, BLAISE, ERNET, JANET, NICNET, INFLIBNET, DELNET, BALNET, MANLIBNET.

# **Selected Readings:**

- 1. Andrew S. T. & David J.W. (2011). Computer networks. Boston: Pearson Prentice Hall.
- 2. Balakrishnan, S.(2000). Networking and the future of Libraries. New Delhi: ESS ESS.
- 3. Barcode basics. <a href="http://www.makebarcode.com/info/info.html">http://www.makebarcode.com/info/info.html</a>
- 4. Bose, K.(1994). Information networks in India: Problems and prospects. New Delhi: ESS ESS.
- 5. Carter, R.(1987). The Information technology hand book. London: Henemann.
- 6. Chapman, E.A.(1970). Library systems analysis guidelines. New York: John Wiley.
- 7. Dhiman, A.K.(2003). Basics of Information technology for librarians and Information scientists. ESS ESS.
- 8. DRTC(1999). Library networks in India (Seminar Papers). Bangalore, DRTC, ISI.
- Haravu, L.J.(2004). Library automation: design, principles and practice. London: Allied publishing.
- 10. Jeanne, F.M. (2006). A librarian's guide to the Internet: A guide to searching and evaluating Information. Oxford: Chandos publishing.
- 11. Kaul, H K(1992). Library networks: an Indian experience. New Delhi: DELNET.
- 12. Kumar, P.S.G. (2004). Information technology: Applications (Theory and Practice). DelhiL: B.R. Publishing.
- 13. Lucy, A. T.(2005). An introduction to computer based Library system. 3<sup>rd</sup> Ed. Chichester: Wiley.
- 14. Patnaik, S.(2001). First text book on Information technology. New Delhi: Dhanpat Rai.
- 15. Ravichandra Rao (1996). Library automation. New Delhi: New Age International.
- 16. Rich, E. and Knight K.(1994). Artificial Intelligence, 2<sup>nd</sup> Ed. New Delhi: T.M.H.
- 17. Richard J.(2006). The institutional repository. Oxford: Chandos publishing.
- 18. Vishwanathan, T.(1995). Communication technology. New Delhi: T.M.H.
- 19. Zorkoczy, P. (2005). Information technology: An introduction, London: Pitman.
- 12. <a href="http://www.inflibnet.ac.in">http://www.inflibnet.ac.in</a>
- 14. http://www.delnet.nic.in
- 15. http://www.oclc.org

# **Library Automation Software**

# Unit 1

- Creation of Database: CDSISIS / WINISIS.

#### Unit 2

- Use of Library software: Koha/Libsys/SOUL etc.,

- Database Searching. Webcats and WebOPACs, LC Catalog, OCLC etc. Internet Searching,

#### Unit 4

- Use of search engines: Google, Yahoo etc.

Communication skills – Effective speaking. Improving vocabulary and grammar. Elements of

# Soft Core

# **Marketing of Information Products and Services**

# Unit 1

Emergence of Information Society and Knowledge Society and conceptualization of Information as a
Resource: as a commodity and Information economics, Economics of Information; Growth of
Information Industry and Implications on Library and Information Services and Products. Trans
border data flow: agencies in TBDF, types of TBDF, barriers in BDF – access, linguistic, legal,
economic and cultural (Information Consolidators, Aggregators, and Consortia etc.)

# Unit 2

- Marketing concepts; Corporate Mission; Marketing Strategies. Concept of Marketing in Non-profit
   Organizations
- Portfolio Management BCG Matrix Model; Product Market Matrix; Product Life Cycle, Pricing Information.

#### Unit 3

- Marketing Mix; Kotler's Four C's; McCarthy's Four P's. Packing, Branding and Advertising

#### Unit 4

- Marketing Plan & Research: Corporate Identity, Marketing plans: Marketing Research. Market
  Segmentation and Targeting; Geographic and Demographic Segmentation; Behavioral and
  Psychographics Segmentation; User Behavior and Adoption. Costing and Pricing of Information
  products and service objectives and Importance. Influencing factors in pricing. Techniques of
  pricing
- Marketing Information Products & Services.

# **Selected Readings:**

- 1. Cawkell, A.E., Ed. (1987). Evolution of an Information society. London: ASLIB.
- 2. Cronin, B(1981). Marketing of Library and Information services. London: ASLIB..
- 3. Eileen, E. D.S.(2002). Marketing concepts for Libraries and Information services. 2<sup>nd</sup> Ed. London: Facet Publishing.
- 4. Jain, A.K and others Ed. (1995). Marketing of Information products and services. Ahmedabad: IIM.
- 5. Kotler, P. (1975). Marketing for non-profit organization. Prentice-Hall.
- 6. Saez, E.E. (1993). Marketing concepts for Libraries and Information services.
- 7. IASLIC (1988). Marketing of Library and Information services (13<sup>th</sup> IASLIC Seminar papers), Calcutta: IASLIC.

#### **Conservation and Preservation of Information Resources**

#### Unit 1

- Introduction to concepts of archiving, Preservation and Conservation. Need and significance of Archiving, Preservation and Conservation of Information Resources.
- Evolution of writing materials: Clay, Papyrus, Metallic plates, Skin, Parchment, Vellum, Palm leaves, etc. Their history, Nature, Use as writing materials and their preservation. History of paper making, Different types of paper and their nature.

#### Unit 2

Different types of Library materials, their preservation and maintenance: Paper Based materials Book and Non Book materials, Library Binding, Binding Standards. Other Materials: AN records,
Magnetic Plates, Tapes & Diskettes, Microforms, Optical media, Magneto Optical Discs, etc.

#### Unit 3

- Hazards to Library materials and their preservation: Environmental hazards, Biological hazards and Human being as an enemy of Library materials. Disaster prevention and recovery.
- To study various National Archival Initiatives of different countries: NARA of US, Australian National initiatives, Public archives of Canada etc.

- Records Management: Concepts and issues involved. Information Resource Management.(include Electronic Resource Management), Code of Ethics for Archivists.
- Digital Preservation

# **Selected Readings:**

- 1. Balloffet, N., Hille, J., & Reed, J. A. (2005). Preservation and conservation for Libraries and archives. Chicago: American Library Association.
- 2. Belicove, M. E., & Kraynak, J. (2007). Internet yellow pages: the fun, fast, and easy way to get productive online. Indianapolis, Ind.: Que.
- 3. Henderson, K. L. (1983). Conserving and preserving Library materials. Urbana-Champaign, Ill.: University of Illinois, Graduate School of Library and Information Science.
- 4. Johnson, P. (2009). Fundamentals of collection development and management, 2nd Ed. Chicago: American Library Association.
- 5. Wynar, B. S., Strickland, S. D., & Graff, S. M. (1999). Library and Information Science annual. Englewood, Colo.: Libraries Unlimited.

# **Users and User Studies**

# Unit 1

Information seeking and use: Need for a conceptual framework; Need for a theory of Information seeking; the desired characteristics of the theory: integrating theories of. Information seeking with broader theories and framework study of attempts towards developing conceptual frameworks; Classification of approaches to conceptual framework; sources of theory; contributions of Mensal, Paisley, T.J. Allen, Dervin, Crane and others.

#### Unit 2

Information need: Definitional and conceptual problems. Distinction between needs, wants, demands and requirements; Levels of Information need -Taylor's model, Lancaster's four levels, Cronin's three levels; Koikela's two levels of Information need; Kinds of Information needs: Continuous and Discreet needs; Application needs and Nutritional needs. Factors affecting Information need: Classification of factors, Dynamics of Information need situation; Paisley's schema of factors, Wilson's categorization of factors. Mick et.al's model of factors. Taylor's variables of Information need and contribution of others.

- User:-Understanding the psychology of Information user; categorization of user; Identifying users and potential users; users by professional groups-industrial, commercial etc.,
- Information use & user studies: Origin, development and evolution of user studies; the renaissance of user studies, the two generations of user studies: The first generation studies- their characteristics, contributions and limitations; The second generation user studies: Their characteristics and contributions, Landmark and bench mark studies.
- Usage study

#### Unit 4

- Methodology of user studies: Study of various methods and tools: Quantitative and Quantitative and Quantitative methodologies; survey methods and experimental approach; Questionnaire, interview and other traditional tools/methods: Participant observation, Diary method, time-line series method of Dervin and others; use of psychometric methods; the promise of quantitative methods and psychometric methods.

- 1. Brittain, J. M. (1970). Information and its users: a review with special reference to the social Sciences, Bath: Bath University Press.
- 2. Chowdhury, G. G., & Chowdhury, S. (2011). Information users and usability in the digital age. New York: Neal-Schuman Publishers, Inc.
- 3. Dobreva, M. (2012). User studies for digital Library development. S.l.: Facet Publishing.
- 4. Kim, C. H., & Little, R. D. (1987). Public Library users and uses: a market research handbook. Metuchen, N.J.: Scarecrow Press.
- Kopycinski, D., & Sando, K. (2007). User surveys in college Libraries. Chicago: College Library Information Packet Committee, College Libraries Section, Association of College and Research Libraries.
- 6. Sridhar, M. S. (2002). Library use and user research: with twenty case studies. New Delhi: Concept Pub. Co..
- 7. Wysocki, A. (1968). Studies of users' needs in scientific Information. Paris: Conseil international des union's scientifiques.

# **Open Elective**

# **Web 2.0**

# Unit 1

 Web 2.0. Definition and Characteristic features. Web 2.0 challenges for Libraries. Web 2.0 based Library services.

#### Unit 2

- Study of the concepts and application: RSS feeds. Metadata. Tags. Tag clouds. Folksonomy, Blogs, Photosharing, Social book marking, Social networking.

#### Unit 3

- Understanding Podcasting, VODcast and Screencast. WIKIS, Mashups, Real time communications.

# Unit 4

- Case studies of Web 2.0 in Libraries.

# **Selected Readings:**

- 1. Bell, A. (2009). Exploring Web 2.0: second generation internet tools blogs, podcasts, wikis, networking, virtual worlds, and more. Georgetown, TX: Katy Crossing Press.
- 2. Campesato, O., & Nilson, K. (2011). Web 2.0 fundamentals with Ajax, development tools, and mobile platforms. Sudbury, Mass.: Jones and Bartlett Publishers.
- 3. Governor, J., Nickull, D., & Hinchcliffe, D. (2009). Web 2.0 architectures. Sebastopol, CA: O'Reilly Media, Inc.
- 4. Shah, S. (2008). Web 2.0 security: defending Ajax, RIA, and SOA. Boston: Charles River Media.
- 5. Shelly, G. B., & Frydenberg, M. (2011). Web 2.0: concepts and applications. Boston, MA: Course Technology.
- 6. Shuen, A. (2008). Web 2.0: a strategy guide. Sebastopol, CA: O'Reilly Media.
- 7. Solomon, G., & Schrum, L. (2010). Web 2.0 how-to for educators. Eugene, O.R.: International Society for Technology in Education.

# **Electronic Information Sources and Services**

#### Unit -1

- Information Sources: Concept, Types/ Kinds, Characteristic features and use. Types of sources (Primary, Secondary, Tertiary and Non- Documentary Sources)
- Evaluation of Information Sources.

# Unit -2

- Electronic Information resources: Meaning and definition, Growth and development, Types.
- E-Journals, e-Books, e-Theses, e-newspapers, Blogs, Wikis.
- Free *online* Dictionaries, Non-free online dictionaries, Free Thesauri.
- Encyclopedia, Virtual Libraries, Subject gateways and Portals

#### Unit -3

- Free databases and fee based bibliographical and full text databases, subject related websites, Institutional repositories, Open Archives and digital Libraries.
- Resource Sharing and Networks: Consortia- Importance and objectives. Study of Information networks and Digital Library Consortia - OCLC, RLIN, INFLIBNET, UGC-INFONET, DELNET, INDEST, FERA, and CSIR e-journal Consortia.

# Unit 4

- Components of Information System: Libraries, Documentation Centres, Information centres, Data centers, Data Banks, Museums, Memories, Publishing Houses.
- Virtual Reference Desk.

- 1. Chowdhury, G.G. and Chowdhury, Sudatta (2000). Searching CD-ROM and online Information sources. London: Library Association.
- 2. Cooper, M. D. (1996). Design of Library automation systems: File structures, data structures and tools. New York: john Wiley.
- 3. Dickson, G.W. and Desanctis, G.. Information technology and the future enterprise: New models for managers. New Jersey: Prentice Hall.
- 4. Ferris, Jeffrey A. (2000) Windows 2000: Development and desktop management. Indiana: New Riders.
- 5. Gallimore, A. (1997). Developing on IT strategy for your Library. London: Library Association.
- Gopinath, M.A. (1984). Information sources and communication media (Annual Seminar). Bangalore: DRTC
- 7. http://www.infolibrarian.com
- 8. http://www.Libraryspot.com
- 9. http://www.refdesk.com
- 10. Krishan Kumar (1996) Reference service, 5<sup>th</sup> ed. New Delhi: Vikas,
- 11. Lesk, Michael (1997). Practical digital Libraries: Books, bytes and bucks. San Francisco: Morgan Kaufmann.

- 12. Ormes, Sorah and Dempsey, Lorcan Eds. (1997). The Internet, networking and the public Library. London: Library Association.
- 13. Sharma, Jitendra Kumar (2003). Print Media and Electronic Media: Implications for the future. Delhi, Authorspress.
- 14. Terplan, Kornel (1999). Intranet performance management. London: CRC Press.
- 15. White C M, et.al. (1973). Sources of Information in the social Sciences. 2 Ed. Bedminster Press, Tolowa, N.J

# **Fourth Semester**

#### Hardcore

# **Information Systems and Services**

# Unit 1

- Information systems: Basic concepts, Meaning, Objectives and Functions.
- Components of Information System: Structure, Functions and Services, Libraries, Documentation Centres, Information centres, Data centres, Information analysis centres, Clearing houses, Data banks, Data Curation centres, Museums, Memories, Institutional Repositories, Open Archives, Referral, Translation Centres, and Publishing Houses.

#### Unit 2

 Understanding the different systems and their services. Understanding the user communities-Identification of user communities; Introduction to the user centered approach to Information seeking behavior. User Education - methods and techniques. User studies.

#### Unit 3

- Study of National Documentation Centres, Information Systems and programmes- NISCAIR, DESIDOC, NASSDOC. NISSAT.
- Study of International Information Systems and programmes- CAS, INSPEC, AGRIS, BIOSIS, INIS, MEDLARS, ASINFO, COMPENDEX. ISI.
- Resource Sharing and Networks: Consortia- Importance and objectives. Study of Information networks- OCLC, INFLIBNET, UGC-INFONET, DELNET, , and INDEST.
- Information policies and programmes. Planning, Design and Evaluation of Information systems.

#### Unit 4

- Information Services- Reference and Documentation Services: Introduction to references services, Examination of reference collection for various types of Libraries. Current Awareness Services (CAS): SDI service. Abstracting service - Abstracting techniques, Types of abstract, abstracting writing (style, content) Abstracting bulletins. Indexing services. Alerting services- List Servs and other email based services. Survey of List servs in different disciplines. FAQs –Developing FAQs – methods and techniques.

Virtual Reference Desk. VRD- Management, technology and resources. The evolution of VRD.
 Major VRD projects. Virtual Libraries. Developing portals and virtual Libraries. Data mining for Information.

#### **Selected Readings:**

- 1. Sunitha Asija(1998). Documentation services in India: A review of some selected documentation centres. New Delhi: Academic Publications.
- Guha, B. (1983). Documentation and Information: Services, techniques and systems. Calcutta: World Press.
- Gupta, B.M. and others(1991). Handbook of Libraries, archives, Information centres in
   India.

   New Delhi: Aditya Prakshan.
- 2. Krishan Kumar (1990). Reference service. New Delhi, Vikas.
- Lucas, Amy. Ed.(1989). Encyclopaedia of Information systems and services. Detriot: Gale Research.
- 4. Neelameghan A. and Prasad, K.N. Eds. (2005).Information systems and services in India. Bangalore: SRELS.
- 5. Vickery, B.(1987). Information systems. London: Butterworths.

# **Research Methodology**

#### Unit 1

- Foundations of research: Meaning and definition, nature, and objectives of research, Types of research, Basic concepts of research. Ethics in research. Areas of research in Library and Information Science. Role of research in the development of scholarship.

# Unit 2

- Planning of research, The Planning process; Review of literature.
- Selection of a problem for research Mode of selection, Sources of problems, Process of identification, Criteria of selection, Formulation of the selected problem.
- Hypothesis Meaning, Types, Sources, Functions, Hypothesis; Conceptualization;
- Research design Essentials of good research design & its importance, Ethical aspects of research; Literature search - print, non-print and electronic sources.
- Research design / writing the research proposal.

- Research methods: Quantitative and qualitative methods of LIS research Scientific Method, Historical method, Descriptive Method, Survey method, Observation method, Experimental method, Case-Study method. Delphi method and Interview method.
- Research techniques and tools: Questionnaire types of questions, structured and unstructured questions, Cautions regarding questions & questionnaires. Interview schedule Types, Merits & limitations; Measurements indices, Pilot studies. Rating scales and check lists.

#### Unit 4

- Sampling & data collection: Sampling techniques, Sample design or choice of sampling techniques, sample size, Sampling and non-sampling errors. Meaning and importance of data, Sources of data, Types of data, Use of secondary data
- Statistical analysis of data: Descriptive Statistics measures of central tendency, mean, median & mode; Tabulation and Generalization; measures of dispersion Range, intermediate ranges, measures of aggregate dispersion, mean-absolute deviation, the variance and covariance, and standard deviation & normal distribution. Chi-square test.
- Graphical presentation of data and report writing: Meaning & importance, commonly used graphics forms-line graphs or charts. Histograms, Frequency polygons, Ogive bar charts, pie charts & pictogram. Sociometry, Statistical Packages SPSS.
- Research reporting: Organisation of report, Structure, Style, Contents, Guidelines of Research Reports, Style Manual Chicago MLA-APA etc. E-Citation and Methods of Research Evaluation.

- 1. Busha, C.Hand Harter, S.S. (1980). Research methods in librarianship: Techniques and interpretation. Orlando, Academic press.
- 2. Charles, H. et.al.(1993). Research methods in librarianship: Techniques and interpretations, New Delhi: Sage.
- 3. Fowler, F.J. (1993). Survey research methods. New Delhi: Sage.
- 4. Goode, W.J. and Hatt, P.K. (1986). Methods in social Science research. New Delhi: McGraw Hill.
- 5. Krishan Kumar(1992). Research methods in Library and Information Science. New Delhi: Vikas,.
- 6. Krishnaswami, O.R. (1993). Methodology of Research in Social Sciences. Bombay:Himalaya.
- 7. Leddy, P. D. (1980). Practical research: Planning design. London: Clive-Bingley.
- 8. Line, M.B. (1967). Library surveys, London: Clive Bingley.
- 9. Nicholas D. and Ritchil, M. (1979). Literature and bibliometrics. London: Clive Bingley.

- 10. Ravichandra Rao, I.K. (1985). Quantitative methods for Library and Information Science. New Delhi: Wiley Eastern.
- 10. Slater, M. (1990). Research methods in Library and Information studies. London: L.A.
- 11. Stevens, R.E. Ed.(1971). Research methods in librarianship. London: Clive Bingley.

# **Digital Libraries and E-Publishing**

#### Unit 1

- Digital Libraries: Concepts and issues. Understanding digital Libraries. Evolution of digital Libraries- Important milestones- Pre- DLI 1, NSF and DLI 1 and 2. Development of literature on digital Libraries. DL communities - Agencies and organizations responsible for the development of DLs- CNI, CNRI, DLF. DL conferences- JCDL, ECDL and ICADL.
- Design and Organization of Digital Library :Architecture, Interoperability, Compatibility, Protocols, standards and User Interfaces,

#### Unit 2

- Content creation Electronic documents, files and file formats. Study of different file formats.
   Studying PDF in detail- features of PDF. Born digital and legacy documents. Digitization- scanning,
   OC Ring and conversion to PDF. Electronic Publishing and scholarly communication, E-journals and e-books
- Digital Preservation, Conservation and Archival Management Problems and prospects

#### Unit 3

- Creating Web documents- Mark Up Languages- SGML, HTML and XML. Creating documents in HTML. HTML editors and tools. Front Page and Dream Weaver. XML and its features- XML tools. DL architecture .Elements of a DL. DOI, Open URL, CrossRef and other aspects. Study of the DL content management issues- Metadata and other resource discovery issues. Access Control and DRM, Security and preservation issues.

#### Unit 4

Open Access Movement and Institutional repositories. Case study of select digital Libraries and IRs.
 California Digital Library; Alexandria Digital Library; ArXive; Cogprintis; Vidyanidhi

- 1. Chowdhury, G.G: Introduction to Digital Libraries. London: Facet Publishing, 2003.
- 2. ICADL: Tutorials on Digital Libraries. Bangalore, 2001.

- 3. Karen S. W. Marilynn B, Stone, T. A. (2003). Electronic publishing: The definitive guide. UK: Hard Shell Word Factory.
- 4. Leona Carpenter, Simon Shaw & Andrew Prescott: Towards the Digital Library. London: LA, 1998.
- 5. Lee, Stuart D: Digital imaging: A practical handbook. 2000.
- 6. Malwad, N.M. and others (1992): Digital Libraries: Conference papers.
- 7. Marilyn Deegan and Simon Tanner (2010). Digital Futures\_Strategies for the information age. London: Facet Publishing.
- 8. Andrew Cox (2010). Introduction to Digital Library Management. London: Facet Publishing.
- 9. Jenny Craven (2010). Web Accessibility Practical advice for the library and information professional. London: Facet Publishing.
- 10. David Nicholas and Ian Rowlands (2010). Digital Consumers Reshaping the information professions. London: Facet Publishing.

# **Soft Core**

# **Digital Library Software**

#### Unit 1

- Installation of Greenstone. Building digital collection using Greenstone

# Unit 2

Creating Metadata. Searching, Indexing. Modifying user interface etc. in Greenstone

#### Unit 3

Installation of DSpace/Eprint.

#### Unit 4

- Building collection to DSpace/Eprint.

# Webometrics, Informetrics & Scientometrics

#### Unit 1

- Basic concepts: Bibliometrics, Informetrics, Scientometrics – Meaning, definitions and scope. Historical development. Study of bibliographic organizations: ISI, NCB, NISTAD.

#### Unit 2

Study and application of Classical Bibliometric Laws – Lotka's law of scientific productivity,
 Bradford's law of scatter, and Zipf's law of word occurrence. Other notable regularities: 80/20 rule,
 Success-breeds-success model, law of Price.

- Study of the citation concepts: citation analysis, citation network, citation matrix, bibliographic coupling, co-citation analysis, Journal Citation Reports,
- Growth and obsolescence of literature. Various growth models, the half-life analogy, determination of aging factor and half life, real vs apparent, synchronous and diachronous.

#### Unit 4

- Science Indicators and Policy. Science Indicators. Science Policy Development. Web Impact Assessment. Link Analysis. Trends in informetrics.

# **Selected Readings:**

- 1. Egghe, L. and Rousseau, R.(2001). Elementary statistics for effective Library and Information services management. London: Aslib,
- 2. Garfield, E.(1979). Citation Indexing: Its theory and applications in Science, technology and humanities. New York: John Wiley.
- 3. Meadows, A.J.(1974). Communication in Science. London: Butterworths.
- 4. Neuendorf, K. (2002). The content analysis guidebook. London: Sage.
- 5. Nicholas D. and Ritchi, M. (1979). Literature & bibliometrics. London: Clive Bingley.
- 6. Ravichandra Rao, I.K. (1985). Quantitative methods for Library and Information Science. New Delhi: Wiley Eastern, 1985.
- 7. Thelwall, M. (2009). Introduction to webometrics: Quantitative web research for the social Sciences. Morgan and Claypool Publishers.

# **Project Work/ Dissertation**

Candidate has to prepare a project report/dissertation under the supervision of the faculty of the department.

# **Open Elective**

# **Scholarly Communication**

#### Unit 1

- Republic of Science and Scholarship: Foundations of Science and scholarship. Principles and paradigms of scientific culture/scholarship: Historical perspective of scholarly communication systems. Scholarship and scholarly traditions.

- Study of journals, their functions, working and processes. The importance of scientific and professional societies in journal publishing; the peer review process; the migration of peer review journals from print to Web-based; Serials pricing crisis phenomena.

# Unit 2

- Rise of Internet as game changer in scholarship, communication, and daily lives.
- Evolution of Internet/Electronic publishing; Web 2.0 and the emergence of Wikipedia; slideshare;
   You Tube; blogs and others as mainstream media. E-Science, Open Data and cyber
   Infrastructure.

#### Unit 3

- Open Access Movement: understanding OA—concepts, principles, ideology and philosophy of Open Source, Open Content; Open Educational Materials and Open Access to scientific literature; the Green and Gold route to OA. Familiarity with the people and organisations behind the OA movement.
- Study of Open source software for IR and DL: DSpace; Eprints; Fedora; Kete

#### Unit 4

- Copyrights issues. Understanding copyrights. Creative Commons. Licensing issues.
- Scientometrics and metrics of scholarly communication. Innovations in measuring Science and scholarship. Mapping Science and tools and parameters: usage and influence factors.

- 1. Derricourt, R.(1996). An author's guide to scholarly publishing, Princeton, N.J.: Princeton University Press.
- 2. Andersen, D.L.(2004). Digital scholarship in the tenure, promotion, and review process. Armonk, N.Y.: M.E. Sharpe.
- 3. Donohue, J. C. (1974). Understanding scientific literatures: bibliometric approach, Cambridge, MIT Press.
- 4. Gabriel, Michael. (1989). A guide to the literature of electronic publishing: CD-ROM, desktop publishing, and electronic mail, books and journals, Conn.: Jai Press.
- 5. http://www.Library.cornell.edu/scholarlycomm/openaccessday.html
- 6. Machlup, F. and others Eds.(1980). Information through the printed word: The dissemination of scholarly, scientific, and intellectual knowledge. 1978-1980. New York: Praeger Publishers.
- 7. Nisonger, T. E. (2007). Journals in the core collection: Definition, identification, and applications. *The Serials Librarian*, *51*(3-4), 51-73.

- 8. Rowlands, I. and Nicholas, D. (2005). New journal publishing models: an international survey of senior researchers. London, CIBER, 2005. Available at <a href="http://www.ucl.ac.uk/ciber/ciber\_2005\_survey\_final.pdf">http://www.ucl.ac.uk/ciber/ciber\_2005\_survey\_final.pdf</a>
- 9. Rowlands, I. *et al.* (2004). Scholarly Communication in the digital environment: what do authors want? London, CIBER. Available at: http://www.ucl.ac.uk/ciber/ciber-pa-report.pdf.
- 10. Saha, S. *et al.* (2003). Impact factor: a valid measure of journal quality? *Journal of the Medical Library Association* 91: 42-6. Available at http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=141186&blobtype=pdf
- 11. Gorman, G.E. (2005). Scholarly publishing in an electronic era. 2005. London: Facet Pub.
- 12. Schroter, S. (2005). Perception of open access publishing: interviews with journal authors. *British Medical Journal*, 330: 756. http://dx.doi.org/10.1136/bmj.38359.695220.82
- 13. Medford, N.J.(2000). The web of knowledge: a festschrift in honor of Eugene Garfield. N.J., Information Today.
- 14. Tibbitts, G. (2006). Measuring quality in journal publishing: new and emerging methods. Presentation at International Academy of Nurse Editors conference, London, August 2003. Available at: <a href="http://www.blackwellpublishing.com/press/files/2006\_08August03\_INANE\_Conference\_London\_GTV2.ppt">http://www.blackwellpublishing.com/press/files/2006\_08August03\_INANE\_Conference\_London\_GTV2.ppt</a>

# **Information Literacy**

#### Unit 1

- Information literacy: Meaning, Definition, Need, Evolution of the concept. Historical perspective of Information literacy.
- Types of Information Literacy: Technology literacy, media literacy, computer and digital literacy.
- Levels of Information Literacy: Entry level, Mid level, High level, Advance level. Lifelong learning and its components.

#### Unit 2

- Partners of Information literacy.
- Models of Information literacy: SCONUL model and CAUL (Australian) model.
- Guidelines and standards for Information literacy programs: ALA and ACRL.

#### Unit 3

- Information literacy programmes.
- Role of Libraries in Information literacy.
- Information literacy instructions in different types of Library and Information centers

#### Unit 4

- Current trends in Information literacy.

- Study of Information literacy programs in the world.
- Information Literacy Competencies
- Challenges facing Information literacy.

# **Selected Readings:**

- American Library Association. Final Report of Presidential Committee on Information Literacy. www.ala.org/at/nill/litt1sthtml
- 2. Barker, K. and Londsale, R. Ed. (1994). Skills for life: the value and meaning of literacy. London: Taylor Graham.
- 3. Bawden, D.(2001). Information and digital literacies: a review of concepts. http://gti/edu.um.es.8080/gomez/hei/intranet/bawden/pdf.
- 4. Eisenberg, M.B., Lowe, C.A. & Spitzer, K.L. (2004). Information literacy: Essential skills for Information age. London: Libraries unlimited.
- 5. Meadows, A.J. Ed. (1991). Knowledge and communication: essays on the Information chain. London: Library Association.
- 6. Pantry, Sheila and Griffiths, Peter (2002). Creating a successful e-Information service. London: Facet.
- 7. Zorana Ercegovac (2008). Information literacy: search strategies, tools & resources for high school students and college freshmen. California: ABC-CLIO

# **Content Management Systems**

#### Unit 1

- Understanding content and content management systems. Roots and Branches of CMS; CMS elements, issues, and challenges; Functionality and Interaction issues; Studying Information Architecture, Content tagging and Metatoring, and Interaction.

# Unit 2

 Study of CMS software packages. CMS software and platforms – Joomla, Drupal, Wordpress and Moodle

#### Unit 3

- Joomla and Drupal: study of features and functionalities and practical implementation

# Unit 4

- Wordpress and Moodle: study of features and functionalities and practical implementation

# **Selected Readings:**

- 1. Arthur, M.H. (2006). Expanding a digital content management system: for the growing digital media enterprise. Boston: Elsevier Focal Press.
- 2. Barrie, M. N. (2009). Joomla! 1.5: a user's guide: building a successful Joomla! Powered website. Upper Saddle River, NJ: Prentice Hall.
- Bradford L. E. (2008). Content management systems in libraries: case studies. Lanham, Md.: Scarecrow Press.
- 4. Hal Stern, Brad Williams, David Damstra (2010). Professional WordPress: design and development. Indianapolis, IN: Wiley Pub., Inc.
- 5. Janet Majure (2010). Teach yourself visually WordPress. Indianapolis, IN: Wiley Pub., Inc.
- 6. Jason, C. (2005). Using Moodle: teaching with the popular open source course management system. Sebastopol, CA: O'Reilly Community Press.
- 7. Jason, C. & Helen F. (2008). Using Moodle. Sebastopol, CA: O'Reilly Community Press.
- 8. Jen K.P. & Sarah E. (2010). Joomla! Start to finish. Indianapolis, IN: Wiley Pub., Inc.
- Jennifer Marriott, Elin Waring(2011). The official Joomla! Book. Upper Saddle River, NJ: Addison-Wesley.
- 10. Mauthe, A. & Thomas, P. (2004). Professional Content Management Systems: Handling Digital Media Assets. John Wiley & Sons.
- 11. Ric S. & Brice D. (2011). Drupal 7 bible. Indianapolis, IN: Wiley.
- 12. Ron S. & Kenneth C. (2010). Using Joomla. Beijing; Cambridge [Mass.]: O'Reilly.
- 13. Tris H. (2011). Using WordPress. Indianapolis, Ind,: Que.

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