MASTER OF LIBRARY AND INFORMATION SCIENCE

SYLLABUS

(Under Choice Based Credit System)

2017

Department of Library and Information Science
Central University of Tamil Nadu
Neelakudi Campus, Kangalancherry
Thiruvarur – 610 005
Tamil Nadu, INDIA

S.NO	COURSE CODE	COURSE TITLE	SEMESTER	CREDITS	L	T*	P	Total	Marks
		COURSE STRUCTURE FOR M. Lib. I. Sc. UNDER CBCS – 2017							
1	LIS/1/CC/01	Fundamentals of Library and Information Science	I	3	2	1	0	3	100
2	LIS/1/CC/02	Information Systems and Services	I	4	3	1	0	4	100
3	LIS/1/CC/03	Personality Development and Communication Skills	I	4	3	1	0	4	100
4	LIS/1/CC/04	Management of Library & Information Centres	I	4	3	1	0	4	100
5	LIS/1/CC/05	Information Literacy	I	3	2	1	0	3	100
					13	5	0	18	
6	LIS/2/CC/06	Knowledge Organization – Classification (Theory)	II	3	2	1	0	3	100
7	LIS/2/CC/07	Knowledge Organization – Cataloguing and Metadata (Theory)	II	3	2	1	0	3	100
8	LIS/2/CC/08	Knowledge Organisation – Classification (Practical)	II	4	0	0	4	4	100
9	LIS/2/CC/09	Knowledge Organisation - Cataloguing and Metadata (Practical)	II	4	0	0	4	4	100
10	LIS/2/DSE/10 (Any one)	Technical Communication Community Information System	II	3	2	1	0	3	100
					6	3	8	17	
11	LIS/3/CC/13	Internship	III	2	0	0	2	2	100
12	LIS/3/CC/14	Introduction to ICT & Applications in Libraries (Theory and Application)	III	4	2	0	2	4	100
13	LIS/3/CC/15	Digital Library and Content Management Systems (Theory)	III	4	3	1	0	4	100
14	LIS/3/CC/16	Digital Library and Content Management Systems (Practical)	III	4	0	0	4	4	100
15	LIS/3/DSE/17 (Any one)	Knowledge Management Web Technologies Integrated Library Management System	III	3	2 2 2	1 1 1	0 0 0	3 3 3	100
16	LIS/3/DSE/18 (Any one)	Academic Library System Special Library System Public Library System	III	3	2 2 2	1 1 1	0 0 0	3 3 3	100
					8	2	11	20	
17	LIS/4/CC/21	Information Retrieval	IV	4	2	0	2	4	100
18	LIS/4/CC/22	Research Methods	IV	4	2	2	0	4	100
19	LIS/4/CC/23	Dissertation / Project and Viva-Voce	IV	6	0	6	0	6	100
20	LIS/4/DSE/24 (Any one)	Informetrics and Scientometrics Health Information Systems Agriculture Information Systems Industrial Information Systems	IV	3	2 2 2 2	1 1 1 1	0 0 0 0	3 3 3 3	100
					6	9	2	17	
								Total credits 72	
		Open Electives							
21	LIS/2/OE/11	Information Sources in Science and Technology	II	3	3	0	0	3	100
22	LIS/2/OE/12	Web based Information Resources	II	3	3	0	0	3	100
23	LIS/3/OE/19	Intellectual Property Rights	III	3	3	0	0	3	100
24	LIS/3/OE/20	Electronic Publishing	III	3	3	0	0	3	100

* Tutorials may include Seminar/Colloquium presentations, Assignments, Group discussion, Debates, Field visits etc., Total No. Of Credits
required to be acquired by a student: 72 credits - 60 (core courses) + 12 (Electives including Open Electives)

Objectives

The Department of Library and Information Science, Central University of Tamil Nadu, offers two years course, Master of Library and Information Science (M.Lib.I.Sc). This programme prepares the student with professional competencies, opportunities in wide spectrum of jobs in libraries, archives, publishing firms, the corporate sector, and firms associated with information products and services.

- *The curriculum covers different aspects of nascent Library and Information environments in which students will eventually work.*
- *The courses covered in this programme include interdisciplinary approach of knowledge and information.*
- *This programme helps the students to gain competencies that will allow graduates to begin successful careers in libraries and information environments.*
- *This programme will make students understand the use of information and communication technologies including social aspects of information in providing information resources and services.*
- *The graduates of this programme will demonstrate knowledge of setting up a library or information centre.*
- *Students will have the competencies in planning and implementing information services.*
- *The graduates of this course will have the capability for community and interdisciplinary collaboration, which is very much required for library and information science.*
- *The students will demonstrate the values and ethics of library and information science profession.*

Programme Structure

Master of Library and Information Science (M. Lib. I. Sc.) is a two years program consists of four semesters. A student has to score a minimum of 72 credits. This programme has 16 core courses, 1 internship programme, 4 electives and a dissertation.

Eligibility for Admission

Programme requires completion of Bachelor's Degree of minimum of 3 years duration or its equivalent (under the 10+2+3 or 10+2+4) in any discipline. The candidates with a score of minimum 55% in General Category, 50 % in OBC (non-creamy layer) Category and 45% in SC/ST/PWD Category are eligible to apply.

Programme Outcomes

This programme prepares the student with professional competencies, opportunities in wide spectrum of jobs in libraries, archives, publishing firms, the corporate sector, and firms associated with information products and services.

Course Outcomes

I Semester

Course Code & Title of the Course	Course Outcomes
LIS/1/CC/01 Fundamentals of Library and Information Science	After completion of the course, students will be able to develop their interest in the subject, understand the basic concept and philosophies of the subject and identify the professional associations and their role in the field. Further, students will be able to understand the concept of data, information and knowledge, philosophies of the information and the different models and their application in information science.
LIS/1/CC/02 Information Systems and Services	After completion of the course, students will be able to use different type of information sources; acquainted to provide different type of information services in library & information centers; and be aware of different information systems and networks functioning for information exchange.
LIS/1/CC/03 Personality Development and Communication Skills	After completion of the course, students will be able to develop their personality, communication and marketing skills effectively.
LIS/1/CC/04 Management of Library & Information	After completion of the course, students will be able to manage the library & information centers effectively.

Course Code & Title of the Course	Course Outcomes
Centres	
LIS/1/CC/05 Information Literacy	After completion of the course, students will be in a position to understand and use the information literacy for their academic work.

II Semester

Course Code & Title of the Course	Course Outcomes
LIS/2/CC/06 Knowledge Organization – Classification (Theory)	After completion of the course, students will understand the basic concept and philosophies of library classification, functions of different classification schemes available; and recent trends and developments in the subject.
LIS/2/CC/07 Knowledge Organization – Cataloguing and Metadata (Theory)	After completion of the course, students will understand the basic concept and philosophies of library cataloguing, rules of filing entries and subject headings in cataloguing and different bibliographic standards.
LIS/2/CC/08 Knowledge Organisation – Classification (Practical)	After completion of the course, students will be able to classify library resources by using DDC and UDC schemes.
LIS/2/CC/09 Knowledge Organisation - Cataloguing and Metadata	After completion of the course, students will be able to catalogue library resources by using AACR IIR and use of subject headings.

(Practical)	
LIS/2/DSE/10 Technical Communication	After completion of the course, students will be able to rules and regulations of technical writings and be able to know effective research writing as well as oral presentation.
LIS/2/DSE/10 Community Information System	After completion of the course, students will be aware of developing community information center for providing services to the community.
LIS/2/OE/11 Information Sources in Science and Technology	After completion of the course, students will be aware of different information sources, reference sources, and electronic information sources in science and technology field.
LIS/2/OE/12 Web based Information Resources	After completion of the course, students will be aware of different types of electronic information sources and subject databases for providing effective service to library users.

III Semester

Course Code & Title of the Course	Course Outcomes
LIS/3/CC/13 Internship	After completion of the course, students will be exposed to the lively situation prevailing in advanced libraries of the country.
LIS/3/CC/14 Introduction to ICT & Applications in	After completion of the course, students will be able to understand the development of computers and ICT, the different software and hardware components, devices, operating systems and programming languages etc.

Libraries (Theory and Application)	
LIS/3/CC/15 Digital Library and Content Management Systems (Theory)	After completion of the course, students will be in a position to understand the content management; content developing strategies and digitization of information resources; and theoretical background of creation and management of websites.
LIS/3/CC/16 Digital Library and Content Management Systems (Practical)	After completion of the course, students will be in a position to manage web content development using Joomla! and WordPress as well as handling of digital library/institutional repository using Dspace/Greenstone.
LIS/3/DSE/17 Knowledge Management	After completion of the course, students will be aware of the application of knowledge management basics, strategies and systems applicable in libraries & information centers.
LIS/3/DSE/17 Web Technologies	After completion of the course, students will be aware of well use of Internet technology for learning.
LIS/3/DSE/17 Integrated Library Management System	After completion of the course, students will be aware of different types of ILMS, areas of its application in libraries as well as Barcode and RFID implementation in libraries and information centers.
LIS/3/DSE/18 Academic Library System	After completion of the course, students will be in a position to manage the academic library system and services.

LIS/3/DSE/18 Special Library System	After completion of the course, students will be in a position to manage the system and services of special library and literate the special users by providing library services.
LIS/3/DSE/18 Public Library System	After completion of the course, students will be in a position to manage the system and services of public library and literate the society by providing library services.
LIS/3/OE/19 Intellectual Property Rights	After completion of the course, students will be aware of IPR & copyright, copyright violation and infringement.
LIS/3/OE/20 Electronic Publishing	After completion of the course, students will be aware of ways and means of electronic publishing, various stakeholders of e-publishing, e-publishing techniques & funding models of e-publishing.

IV Semester

Course Code & Title of the Course	Course Outcomes
LIS/4/CC/21 Information Retrieval	After completion of the course, students will be aware of using the indexing techniques to retrieve the useful resources for learning and research.
LIS/4/CC/22 Research Methods	After completion of course, students will be aware of implications of research and confident to take up research work.
LIS/4/CC/23 Dissertation / Project and Viva-Voce	After completion of course, students will be aware of technical writing and research reporting and will make them confident to take up research work.

LIS/4/DSE/24 Informetrics and Scientometrics	After completion of the course, students will be aware of various scientometric indicators and laws, different softwares and application of metrics to draw the inferences from published literature.
LIS/4/DSE/24 Health Information Systems	After completion of the course, students will be aware of stakeholders of health information, different products and services available for health sector, and different information sources for health related information.
LIS/4/DSE/24 Agriculture Information Systems	After completion of the course, students will be aware of stakeholders of Agricultural information, different products and services available for Agriculture, and different information sources related to Agriculture.
LIS/4/DSE/24 Industrial Information Systems	After completion of the course, students will be aware of stakeholders of Industrial information, different products and services available for industries, and latest trends and developments in industrial information systems.

Paper Code : **LIS/1/CC/01**

Paper Name : **Fundamentals of Library & Information Science**

Unit 1: Libraries - Modern Concepts, Role and Types

Library & Society: Role of Libraries in Socio-economic cultural and Educational development; Information Institutions of Different kinds: Libraries, Archives, Documentation Centres, Information Analysis Centres, Museums and their respective roles and functions; Five Laws of Library Science and their Implications.

Unit 2: Laws relating to Libraries and Information

Library legislation: need and essential features' Library legislation in India; Model Public Library Act and its features; Press and Registration Act; Delivery of Books and Newspapers (Public Libraries) Act; Copyright Act; Right to Information Act.

Unit 3: Professional Associations and Organizations

Library and Information Profession: ethics and standards; Professional Associations: National and International; Information and Documentation Organizations: Role of UNESCO, NISCAIR, DESIDOC, NASSDOC, RRRLF, UGC.

Unit 4: Knowledge Society

Characteristics and attributes of Information / Knowledge Society; Legal and Ethical Issues; Information and Knowledge as Economic Resources; Economics of Information; The digital divide; National Information Policy, National Information Infrastructure.

Unit 5: Users and their needs

Types of Communication; Theories and Models of Communication; Channels – formal and informal; Information Transfer Cycle; Barriers to Communication Categories of users; information use contexts; Information seeking behaviour; Theories of Information behaviour: ASK hypotheses; Contributions of Belkin, Wilson, Peter Ingwersen.

REFERENCES

Al-Suqri, M.N. (Ed.). (2015). *Information Seeking Behavior and Technology Adoption: Theories and Trends: Theories and Trends*. IGI Global.

Baker, D. (2011). *Libraries and society: Role, social responsibility and future challenges.* Oxford.

Barua, B. P. (1992). *National Policy on Library and Information systems and services for India: Perspectives and Projections*. Popular Prakashan.

Bawden, D., & Robinson, L. (2015). *Introduction to information science*. Facet Publishing.

Feather, J. (2013). *The information society: a study of continuity and change*. Facet publishing.

Gossen, T. (2016). *Search engines for children: search user interfaces and information-seeking behaviour*. Springer.

Lester, J., & Wllace, C. (2007). *Fundamentals of information studies: Understanding information and its environment*. Neal-Schuman Publishers, Inc.

Mai, J. E. (2016). *Looking for information: A survey of research on information seeking, needs, and behavior*. Emerald Publishing.

Miller, J. B. (2014). *Internet technologies and information services*. ABC-CLIO.

Ranganathan, S. R. (1988). *The Five Laws of Library Science*. New Delhi: Sarada Ranganathan Endowment for Library Science.

Rubin, Richard. (2010). *Foundations of Library and Information Science*. Facet publishing.

Ruthven, I., & Kelly, D. (Eds.). (2011). *Interactive information seeking, behaviour and retrieval*. Facet Publishing.

Tella, Adeyinka (2016) *Information Seeking Behaviour and Challenges in Digital Libraries*. IGI Global.

Totterdell, A., Gill, J., & Hornsey, A. (2005). *An introduction to library and information work*. Facet Publishing.

Semester : I

Paper Code : **LIS/1/CC/02**

Paper Name : **Information Systems and Services**

Unit 1: Information Systems

Definition, Types and Characteristics; Planning, Designing and Evaluation of Information System.

Unit 2: National and International Information Systems and Services

ENVIS, BIS, PIS; AGRIS, INIS, INSPEC, MEDLARS, OCLC, Web of Science, SCOPUS, SCIFINDER, Google Scholar, BIOSIS, ERIC.

Unit 3: Information Networks and Consortia

Resource Sharing and Networking – Objectives and Scope; Features and Characteristics of Library Networks; Data Networks – NICNET, ERNET, NKN; Library Networks: INFLIBNET, DELNET; Library Consortia: e-ShodhSindhu, NKRC (CSIR-DST).

Unit 4: Information Products and Services

Information services, concept, definition need and trends; Reference and Referral Services, Virtual Reference Service; Alerting services – CAS, SDI; Bibliographic, Document Delivery Services; Reference Interview and search techniques; Information analysis, consolidation and repackaging.

REFERENCES

Bopp, R. E., & Smith, L. C. (Eds.). (2011). *Reference and Information Services: An Introduction: An Introduction*. ABC-CLIO.

Cassell, K. A., & Hiremath, U. (2013). *Reference and information services: An introduction*. American Library Association.

Chowdhury, G., & Chowdhury, S. (2001). *Information sources and searching on the World Wide Web*. Facet Publishing.

Ghenney, F. N. (1980). *Fundamentals of Reference Sources*. Mc Graw Hill.

Guha, B. (1999). *Documentation and Information Services (2nd Ed.).* World Press.

Higgens, C. (Ed.). (1980). *Printed Reference Materials*. Library Association.

Hirh, Sandra. (2015). *Information Services Today: An Introduction*. Rowman.

Keith R. McCloy. (1995). *Resource Management Information Systems*: *process and practice*. Bristol, Taylor & Francis.

Kenneth C. Laudon, Jane Price Laudon. (2002). *Management information systems: managing the digital firm*. Prentice-Hall.

Krishan Kumar. (1984). *Reference Service*. Vikash Publication.

Harrell, M. C., Thie, H. J., Yardley, R. J., & Lytell, M. C. (2011). *Information Systems Technician Rating Stakeholders: Implications for Effective Performance. Rand National Defense Research Inst Santa Monica ca.*

Mcnurlin. (2003). *Information Systems Management in Practice*. Pearson Education.

Ranganathan, S. R. (1991). *Reference Service*. Sarada Ranganathan Endowment for Library Science.

Rowley, J. E. (1996). *The Basics of Information Systems*. Facet Publishing.

Seetharama, S. (1997). *Information Consolidation and Repackaging Framework, Methodology, Planning*. Ess Ess Publications.

Shuman, Bruce A. (2004). *Issues for Libraries and Information Science in the Internet Age.* Libraries Unlimited Inc.

Semester : I

Paper Code : LIS/1/CC/03

Paper Name : Personality Development and Communication Skills

Unit 1: Personality and its Characteristics

Personality Types, Traits and Characteristics; Social, Soft and Influencing Skill Development; Attitude, Appearance, Time and Stress Management Skill.

Unit 2: Communication Skills

Professional Communication Skills (Verbal, Non-Verbal & Written); Communication; Understanding the Audience, Presentation, Body Language, Interpersonal Skills and listening Skills; Technical Communication Skills and Editorial Tools.

Unit 3: Marketing Skills & Public Relations

Marketing Planning and Strategy; Publicity and Promotion; Public Relations and Liaising with Library Authority and Patrons.

Unit 4: Leadership and Vision

Organizational Ability, Team Leadership and Problem Solving; Project Management, Short term and long term planning, Disaster Management, Time Management, Stress Management, Conflict and Crisis Management; Visionary and Futuristic Approach, Preparation of Vision Document; Negotiation Skills & Strategies.

REFERENCES

Berne, Eric. (2016). *Games People Play*. Penguin.

Born, Paul. (2012).*Community conversations: mobilizing the ideas, skills, and passion of community organizations, governments, businesses, and people*. BPS books.

Cain, Susan. (2013). Quiet: *The power of introverts in a world that can't stop talking*. Penguin.

Cartwright, Roger. (2002). *Mastering team leadership*. Macmillan.

Dewey, Barbara & Creth, Sheila D. (1993). *Team Power: Making Library Meetings Work*. ALA

HBR's 10 Must Read: On Leadership (2011).Harvard Business Review.

HBR's 10 Must Reads: On Managing People. (2011) . Harvard Business Review.

HBR's 10 Must Reads: *On Managing Yourself*. (2011) . Harvard Business Review.

HBR's 10 Must Reads: On Strategy (2013) .Harvard Business Review.

HBR's 10 Must Reads: On Strategy . (2011) .Harvard Business Review.

HBR's 10 Must Reads: On Teams (2013) .Harvard Business Review.

Scott, Cynthia, D.Jaffe, Tobe, Dennis T. & Glenn, R.. (1995). *Organizational vision*, *values and mission*. Crisp.

Stewart, Greg L., Manz, Charles C., & Sims, Henry P. (1999). *Team work and group dynamics*. Wiley.

Semester : I

Paper Code : **LIS/1/CC/04**

Paper Name : **Management of Library & Information Centres**

Unit 1: Schools of Management Thought

Classical, Neo-classical and Modern management theories; Principles of Scientific Management; Fayol's Principles; Functions of Management (POSDCORB).

Unit 2: Systems Analysis and Design

Systems Theory; Open and Closed Systems; Project Management Techniques – PERT/CPM, Decision Tables; Data Flow Diagram; Quality Management (TQM, Six Sigma); Change Management, Disaster Management, SWOT Analysis.

Unit 3: Resources Management

Collections, Space, Furniture and Equipment; Human Resources: Job Analysis, Job Description, Job Classification, Selection and Recruitment, Performance Appraisal; Financial resources: Budgeting, Accounting, Auditing; Resource mobilisation.

Unit 4: Preservation and Conservation of Library materials: Print and Electronic

Environmental, Chemical and Biological factors affecting Library Materials; Conservation Techniques of Library Materials; Binding.

Unit 5: Marketing of Library & Information Products and Services

Marketing concepts, Market Research, Marketing strategies, Marketing Mix, Market Segmentation, Marketing Plan.

REFERENCES

Beard well, Ian & Holden, Len. (1996). *Human Resource Management: A contemporaryperspectives*. Longman.

Bryson Jo. (1996). *Effective Library and Information Management*. Jaico Pub. House

Drucker, Peter F. (2002). *Management Challenges for the 21st century.* Oxford; Butterworth Heinemann.

Durean, J. M. & Clements, D. W. G. (1986). *Principles of the preservation of library materials*. IFLA.

Evans, G. Edward & Layzell, Patricia. (2007). *Management Basics for Information Professionals*, 2 Ed. Libraries Unlimited.

Harvey, Poss. (1993). *Preservation in libraries: a reader*. RR Bowker.

Johnson, P. (2014). *Fundamentals of collection development and management*. American Library Association.

Johnson, Peggy. (2009*). Fundamentals of Collection Development and Management*,. 2nd Ed. ALA.

Kotler, Philip (2003*). Marketing Management*. 11th Ed. New Delhi: Pearson.

Narayana, G J. (1991). *Library and Information management*. Prentice Hall of India.

Paton, Robert A. (2000*). Change Management*. Response Books.

Rowley, Jennifer (2001). *Information Marketing*. Ashgate Publishing Limited.

Stoner, James A F (et.al). (1996). *Management: Global Perspectives*. 10th Ed. Mc Graw Hill Inc.

Stueart, Robert D & Moran, B. (2007). *Library and Information Centre Management.* 7th ed. Libraries Unlimited.

Paper Code **:** **LIS/1/CC/05**

Paper Name **:** **Information Literacy**

Unit 1: Introduction to Information Literacy

Information: Characteristics of information; Types of information; Information society, Information literacy models, standards; concept of lifelong learning.

Unit 2: Approaches of Information Literacy

Digital literacy, Digital divide and information literacy, Media literacy, computer literacy.

Unit 3: Information Literacy and Libraries

Information literacy and types of libraries, Resource literacy, Research literacy.

Unit 4: Information Literacy Policies

International and national initiatives, Policies and guidelines IFLA, ALA, UNESCO, Information literacy skills and best practices.

REFERENCES

Association of College and Research Libraries (ACRL). (2000). *Information Literacy Competency Standards for Higher Education*. American Library Association.

Bawden, D. (2001). Information and digital literacies: a review of concepts. *Journal of documentation*, 57(2), 218-259.

Bruce, Christine. (1997). *The Seven Faces of Information Literacy*. Auslib Press.

Council of Australian University Librarians. (2001). *Information Literacy Standards*. Canberra Council of Australian University Librarians.

Presidential Committee on Information Literacy, American Library Association. (1989).

Society of College, National and University Libraries (SCONUL). (1999). *Information skills in higher education: a SCONUL Position Paper*. London: SCONUL. http://www.sconul.ac.uk/activities/inf_lit/papers/Seven_pillars.html

Torras, M. C. & Saetre, T. P. (2009). *Information Literacy Education*. Oxford: Chandos Publishing.

Paper Code : LIS/2/CC/06

Paper Name : Knowledge Organisation – Classification (Theory)

Unit 1: Knowledge Organization

Universe of Knowledge/Subject: Nature and Attributes; Modes of Formation of Subjects.

Unit 2: Theories of Classification

Schools of Classification; Normative Principles; The Three planes of work; Principles and postulates of Helpful Sequence; Facet Analysis; Notation: Kinds and Hospitality; Call Number.

Unit 3: Classification Schemes

Features of Library Classification Schemes; Salient Features of DDC, UDC, and CC.

Unit 4: Interdisciplinary Applications of Knowledge Organisation Theories

Application of facet theory of knowledge organisation in website designing, faceted search, domain modelling. SKOS.

REFERENCES

Bowman, J. H (2004). *Essential Dewey*. Facet Publishing.

Broughton, Vanda. (2004). *Essential Classification*. Facet Publishing.

Comaromi, J. P., Warren, M. J. & Dewey, Melvil. (1982). *Manual on the Use of the Dewey Decimal Classification*. Forest Press.

Foskett, A. C. (2002). *The Subject Approach to Information*. Facet Publishing.

Hussain, Sabahat. (2004). *Library Classification: Facets and Analysis*. B. R. Publishing.

Kao, Mary L. (2003). *Cataloguing and Classification for Library Personnel*. Jaico.

Kumar, P. S. G. (2003). *Knowledge Organization, Information Processing and Retrieval Theory*. B. R. Publishing.

Pathak, L. P. (2000). *Sociological Terminology and Classification Schemes*. Mittal Publications.

Ranganathan, S. R. (2006). *Philosophy of Library Classification*. Ess Ess.

Taylor, A. G. (2007). *Introduction to Cataloguing and Classification* .10th Ed.. Atlantic.

Semester : II

Unit 1: Bibliographic Records

Bibliographic Entities and Bibliographic Records; Bibliographic files of different kinds, Bibliographic Objectives.

Unit 2: Content Description rules and subject headings

Indexing languages, controlled vocabularies, rules for choice of heading, rendering of names, subject heading lists.

Unit 3: Rules for Bibliographic Description

Principles of Description; FRBR; Standards for Description: ISBD, AACR-2, RDA; Standards for Machine Readable Bibliographic Records – ISO2709 and the MARC family of Formats, MARC- XML.

Unit 4: Metadata

Types of Metadata; Metadata Standards: Dublin Core, Encoded Archival Description (EAD).

REFERENCES

American Library Association. (1978). *Anglo-American cataloguing rules*. 2ⁿᵈ Ed. 2002 revision, 2005 update. American Library Association.

Andrew, P. G. (2003). *Cataloguing Sheet Maps*. Haworth Press.

Bowman, J. H. (2002). *Essential cataloguing the basics*. Facet Publishing

Broughton, Vanda. (2006). *Essential Thesaurus Construction*. Facet.

Broughton, Vanda. (2011).*Essential Library of Congress Subject Headings*. Facet

Dhawan, K. S. (1997). *Online Cataloguing Systems*. Commonwealth Publication.

Dhiman, Anil K. (2004). *Cataloguing of Non-book Materials*. Ess Ess.

Girija Kumar & Krishan Kumar. (2004). Theory *of Cataloguing*. New Delhi: Vikas

Gredley, Ellen & Hopkinson, Alan (1990). *Exchanging Bibliographic Data: marc and other International Formats*. ALA.

Hagler, Ronald & Simmons, Peter. (1991). *The Bibliographic Record and Information*. ALA.

Haynes, David. (2017). *Metadata for Information Management and Retrieval, Understanding metadata and its use* . Facet.

Khan, M. T. M. (2005). *Anglo-American cataloguing rules*. Shree Publishers.

Krishan Kumar. (1986). *An Introduction to Cataloguing Practice*. 3rd Rev. Ed. New Vikas Publishing.

Mitchell, Anne M. & Surratt, Brian E. (2005). *Cataloguing and Organizing Digital Sources*. Facet Publishing.

Mitchell, Anne M. & Surratt, Brian E. (2005). *Cataloguing and Organizing Digital Sources*. Facet.

Ranganathan, S. R. (1988*). Classified Catalogue Code with additional rules for dictionary catalogue*. Sarada Ranganathan Endowment for Library Science.

Roe, Sandra K (2002). *The Audio Visual Cataloguing*. Haworth Press.

Sears, M. E. (2010). *Sears List of Subject Headings*. 20ᵗʰ Ed. H. W. Wilson.

Taylor, A. G. (2007). *Introduction to Cataloguing and Classification* . 10ᵗʰ Ed. Atlantic.

Welsh, Anne & Batley, Sue. (2012). *Practical Cataloguing AACR, RDA and MARC21*. Facet Publishing

Semester : II

Paper Code   :   LIS/2/CC/08

Paper Name   :   Knowledge Organisation - Classification (Practical)

Scheme 1: Dewey Decimal Classification - Practical

Classification of Macro and Micro documents using **specified edition of DDC.**

Scheme 2: Universal Decimal Classification - Practical

Classification of Macro and Micro documents using **specified edition of UDC.**

REFERENCES

Dewey Decimal Classification and Relative Index.OCLC.

Universal Decimal Classification . UDC Consortium.

Semester : II

Paper Code : **LIS/2/CC/09**

Paper Name : **Knowledge Organization - Cataloguing and Metadata (Practical)**

Cataloguing Practical

Cataloguing of different kinds of documents – Print and E-resources using appropriate standards – AACR-2R, MARC 21, and KOHA software.

Main and Added Entries of Documents: Single Author, Joint Authors, Editors, Corporate Author, Continuing Resources (Serials),Pseudonyms Author and Anonymous Books, Non-Book Materials (e-resources), Assigning Subject Heading to Documents-Sear's List of Subject Heading.

REFERENCES

American Library Association. (1978). *Anglo-American Cataloguing Rules.* ALA

Gorman,Michael.(2004) *The Concise AACR2 4*. American Library Association.

Haynes, Elizabeth & Fountain, Joanna F. (2005). *Unlocking the Mysteries of Cataloging: A Workbook of Examples*. Libraries Unlimited.

Sears, M. E. (2010). *Sears List of Subject Headings*. 20th Ed. H. W. Wilson.

Semester : II

Paper Code : **LIS/2/DSE/10**

Paper Name : **Technical Communication**

Unit 1: Technical Writing

Communication Process - Types: Verbal, Non-verbal; Formal, Informal; Types of writing; Technical writing: Principles, characteristics; Language as a medium for communication; readability; Audience Research.

Unit 2: Organization, Layout and Presentation of Information

Learned papers and popular articles, Technical Reports and project proposals; Book design and page layout.

Unit 3: Mechanics of Writing

Common problems in spelling, grammar, usage and punctuation; Use of Style manuals – Chicago, APA and MLA; Reference Management Software; Copy editing and proof reading.

Unit 4: Oral Presentation Skills

Requirements for Audio Visual presentation.

REFERENCES

Alred, Gerald J, Brusaw , Charles T & Walter, E.(2011). *The Handbook of Technical Writing*. 10th Ed. St. Martin's Press.

Basu, B N. (2007). *Technical writing*. Prentice Hall India.

Booth, P. F. (1991). *Report Writing*. 2nd Ed. Huntington.

Chandra, A. & Saxena, T. P. (1979). *Style Manual*. Metropolitan Books.

Cooper, B. M. (1986). *Writing Technical Reports*. Penguin.

Devarajan, G. (2012). *Technical Communication for Information Managers*. Ess Ess.

Gerson, S. J. & Gerson, S. M. (1992). *Technical Writing, Process and Product*. Prentice Hall.

Huckin, T. N. & Olsen, L. A. (1991). *Technical Writing and Professional Communication for Non-Native Speakers of English*. 2nd Ed. McGraw-Hill.

James, G. Gray. (1986). *Strategies and Skills of Technical Presentations*. Greenwood Press.

Meenakshi Raman & Sangeetha Sharma (2015). *Technical Communication Principles and Practice*. 3rd ed. Oxford University Press.

Sherman, T. A. & Johnson, S. S. (1990). *Modern Technical Writing*. 5th ed. Englewood Cliff's: Prentice Hall.

Van Alstyne, J. S. (1986). *Professional and Technical Writing Strategies.* Englewood Cliffs, New Jersey: Prentice-Hall Inc.

Weisman, H. M. (1980). *Basic Technical Writing*. Charles Merrill Publishing.

Semester : II

Paper Code : **LIS/2/DSE/10**

Paper Name : **Community Information Systems**

Unit 1: Community Information Services (CIS)

Community Information Services – Definition, Need, Features and objectives; Providers of Community Information Services: Systems, Agencies and Institutions, Libraries as CIS Providers; Role of public libraries, Library Outreach Programmes, Library Publicity and Public Relation; Community Information Systems and Services: Global and National Scenario.

Unit 2: Community Information Resources

Documentary Sources: vital statistics, land records, official publications, magazines, maps & atlases, photographs, personal collections, leaflets, local history materials, etc.; Institutional Sources: Publications of local governments and government agencies, educational and religious institutions, NGOs, political parties, labour and peasant organizations, etc; Human Resources: village level leaders, field extension personnel, religious leaders, government officials, etc; Cultural heritage resources and Digital resources.

Unit 3: Local Studies

Definition and Scope, Types and kinds of local studies materials; Local studies — Collection and Organization in libraries; Government agencies, local organizations including the calendar of local events; Area Profile — Meaning, Structure and compilation; Local history, Local heritage and Oral history.

Unit 4: Planning of Community Information Centres

Community Information Centres: Planning and Role of Information Services; Access to Community Information Services.

Media and Mechanisms; Projects and initiatives on community information organization; Digital Community Information Services; Community Information Portals.

REFERENCES

Babu, B. Ramesh & Gopalakrishnan, S. (2004). *Information, Communication, Library and Community Development*. B.R. Publishing.

Bunch, A. (1982). *Community Information Services: Their Origin, Scope and Development*. Clive Bingley.

Chandrasekhara Rao. (1996). *Library Services for Tribal Community*. Delta Publishing House.

Childers, Thomas & Post, Joyce A.(1975). *The Information Poor in America. Metuchen* . Scarecrow Press.

Durnance, J.C. (1984). *Armed for action : Library Response to Citizen Information needs*. Neal- Schuman.

Kahn, A.J et al. (1996). *Neighborhood Information Centers: A study and Some Proposals*. Columbia University School of Social Works.

Sarada, K. (1986*). Rural Library Services in India*. ESS ESS Publications.

Vashishth, C.P. (ed.) (1995). *Libraries as Rural Community Resource Centers*. B.R. Publishing Corporation.

Vos, H. (1969). *Information Needs in Urban Areas: A summary of Research in Methodology.* Rutgens University Press.

Warner, E. S., Murray, A. D. & Palmor, V. E. (1973). *Information Needs of Urban Residents*. Regional Planing Council, 1973.

Semester : II

Paper Code : **LIS/2/OE/11**

Paper Name : **Information Sources in Science and Technology**

Unit 1: Information Sources

Documentary and Non-Documentary Sources; Primary, Secondary and Tertiary Sources of Information.

Unit 2: Reference Sources

Categories, Characteristics and Usefulness (dictionaries, encyclopedias, yearbooks, directories, biographical sources, geographical sources, statistical sources, sources of current information) Evaluation of Reference Sources.

Unit 3: Electronic Sources of Information

Electronic Sources: E-Books, E-Journals, ETDs, Web-OPAC; Subject Gateways/Portals, Databases, Bulletin Boards, Discussion Group/Forum, Multimedia Resources,; Search Engines, search strategies, access to information sources.

Unit 4: Information Sources in Science and Technology

Web of Science, Scopus, Scifinder, Major abstracting and indexing databases in Science and Technology. Open Access Resources like arXiv, ChemXseer, PubMed.

REFERENCES

Albert, Walker. (1974). House Journals. In Kent, A. et al. (Eds.). *Encyclopaedia of Library and Information Science*. Marcel Dekker. Vol. 11, pp. 61-64.

Borowick, J. N. (1996). *Technical Communication and its Applications*. 2nd Ed. Prentice Hall.

Chowdhury, G. G. & Chowdhury, Sudatta. (2001). *Searching CD-ROM and Online Information Sources*. Library Association Publishing.

Eleaner, Mitchell & Walters, Sheila A. (1995). *Document Delivery Services: Issues and Answers*. Learned Information Inc.

Guha, B. (1983). *Documentation and Information – Services, Techniques and Systems*. 2nd ed. World Press.

Hutchins, John. (1998). *Translation Technology and Translator*. Machine Translation Review. Vol. 7, pp. 7-14.

James E. Bobick & G. L. Berard (2011). *Science and Technology Resources: A Guide for Information Professionals and Researchers*. Libraries Unlimited Inc.
McGrath, Mike. (2004). *Interlending and Document Supply: A Review of Recent Literature*. XLVII. Interlending and Document Supply. Vol. 32(1), pp. 50-54.

Penland, Patric R. (1971). *Content Analysis*. In Kent, Allen and Lancour, Harold (Eds). Encyclopaedia of Library and Information Science. New York: Marcel Dekker Inc. Vol. 5, pp. 632- 665. Prior, Albert. (1997). Intermediaries and Electronic Information – What Role for the

Rowley, J. (1999). *The Electronic Library*. 4th ed. London: Library Association Publishing.

Saracevic, T. et al. (1990*). Nature of Interaction between Users and Intermediaries in Online Searching: A Qualitative Analysis*. In Proceedings of the 53rd Annual Meeting of the American Society for Information Science. Vol. 27, pp. 47-54.

Singer, Carol A. (2012). *Fundamentals of Managing Reference Collections*. Facet publishing .

Subramanyam, K. (1980). *Trade Catalogues: Technical Literature*. In Kent, A. et al. (eds.). Encyclopaedia of Library and Information Science. Marcel Dekker. Vol. 30, pp. 190- 198.

Walford, A. J. (1968-70). *Guide to Reference Materials* (3 Vols). Library Association.

Paper Code : **LIS/2/OE/12**

Paper Name : **Web based Information Resources**

Unit 1: General Introduction

Nature and characteristics of information; Role of electronic resources in scholarly communication; trends in scholarly communication.

Unit 2: Electronic Information Resources

Definition, characteristics and types; Information Resources on the Internet – E-books, E-journals, information gateways, Open Course Ware, MOOC , DRM, DOI, Link resolvers, open access resources, open data intiatives , preprints, discussion forums, technical reports, OPACs, ETDs, Patents, reference sources, search tools, subject directories, courseware, software.

Unit 3: Prominent sources in different subjects

Databases: Bibliographic, Full-text, numeric,; Ready Reference Sources – dictionaries, encyclopaedias, yearbooks, directories, biographical sources, geographical sources, handbooks and manuals and statistical sources.

REFERENCES

Andrew C. White & Eric Djiva Kamal. (2003). *E-metrics for Library and Information Professionals: How to Use Data for Managing and Evaluating Electronic Resource Collections*. Neal-Schuman.

Cathy De Rosa et al. (2005). *Perceptions of libraries and information resources: a report to the OCLC membership*. OCLC Online Computer Library Center,

Frank Rennie & Robin Mason. (2011). *e-Learning and Social Networking Handbook: Resources for Higher Education*. Routledge

Miller, William & Pellen, Rita .(2013). *Adapting to E-Books*. Routledge

Pitschmann, Louis. (2001). *Building sustainable collections of free third-party Web resources. Washington*, D.C.: Digital Library Federation, Council on Library and Information Resources.

Price, Kate & Have gal, Virginia (2011) *E-books in Libraries: A Practical Guide*, Facet Publishing.

Siemens, Raymond George, & Schreibman, Susan. (2007). *A companion to digital literary studies*. Blackwell Publishing.

Semester : III

Paper Code : **LIS/3/CC/13**

Paper Name : **Internship**

To place students in a working Library & Information Centre environment approved / recommended by the Department to enable them to be exposed to the various sections / divisions to gain practical knowledge and to give them working experience.

Internship shall be for one month (30 days).

A Report shall be submitted by each student along with a certificate from the head of the library concerned for the completion of Internship. The Internship report will be evaluated by the department faculty and marks will be sent to the Controller of Examinations.

Semester : III

Paper Code : **LIS/3/CC/14**

Paper Name : **Introduction to ICT and Application in Libraries (Theory and Application)**

Unit 1: Computer Technology

Evolution of Digital Computers; Number systems; Character Representation: ASCII, ISCII and UNICODE; Basic Components of a Computer: Arithmetic Logic Unit; Control Unit; Memory Unit; Input / Output devices; System Software; Application software. Operating Systems: Linux, Windows; Fundamentals of programming; Introduction to 'C' programming; Object-oriented programming. Java, PHP.

Unit 2: Introduction to Communication Technology

Tele-communication: Transmission Media, ISDN, PSDN, Multiplexing, Modulation, Standards and Protocols, Wireless Communication; Networking: Topology and levels of networks, Network protocols, Network Models (OSI), Tools and Devices. Hardware requirements; Network Types and topologies: LAN, MAN, WAN, Wireless; Bus, Star, Ring and Token; Setting up Server; Cloud Computing.

Unit 3: Library Automation

Planning and implementation; Automation of in-house operations – file requirements for Acquisition, Cataloguing, Circulation control, Serials Control, OPAC; Library Security Technology: Barcode, QR code, RFID, CCTV, Biometrics, Smartcard.

Unit 4: Library Automation Packages

KOHA, Hands-on experience on Library Automation Software: KOHA.

REFERENCES

Bach, Maurice J. (2015). *Design of the Unix Operating Systems*. Pearson

Bilal, Dania (2014). *Library Automation: Core Concepts and Practical Systems Analysis*, 3rd Edition. ABC-CLIO.

Brown-Syed, Christopher (2011).*Parents of Invention: The Development of Library Automation Systems in the Late 20th Century*. ABC-CLIO.

Date, C. J. (2003). *An Introduction to Database Systems*. Pearson Education.

Doyle, Stephen (2015) *Complete ICT for Cambridge IGCSE*. Oxford University Press.

Gopal Krishan. (2005). *Modern Library Automation*. Authors Press.

Grewal, Gagandeep. (2004). *Handbook of Library Security*. Dominant.

Kochtanek, Thomas R. & Matthews, Joseph R. .(2011). *Library Information Systems: From Library Automation to Distributed Information Access Solutions*. Libraries Unlimited.

Leon, Alexis & Leon, Mathews. (2006). *Fundamentals of Database Management Systems*. Vijan Nicole.

Matthew, Neil & Stones, Richard. (2008). *Beginning Linux Programming*. Wiley

Petersen Richard .(2017). Linux: The Complete Reference, McGrawHill.

Reddy, Satyanarayana. (2001). *Automated Management of Library Collections*. Ess Ess.

Redmond E. (2012). *Seven Databases in Seven Weeks*. Shroff.

Shotts, Williams E. (2012). *The Linux Command Line – A Complete Introduction*. No starch Press.

Silberschatz, A.(2005). *Operating System Concepts*. Wiley

Silberschatz. (2013*). Database System Concepts Paperback*. McGrawHill.

Siwatch, Ajit S. et al. (2006). *Approaches to Modern Librarianship*. Sanjay.

Stallings, William. (2007). *Computer Networking with Internet Protocols and Technology*. Pearson.

Sujatha, G. (1999). *Resource Sharing and Networking of University Libraries*. Ess Ess

Sybex. (2007*). Linux Complete*. BPB Publications.

Ward, Brian (2014) *How Linux Works – What Every Super user Should Know* . No Starch Press.

Wilson, Kevin (2016).*Essential Computing: Concepts of ICT*. Elluminate Press.

Semester : III

Paper Code : LIS/3/CC/15

Paper Name : Digital Library and Content Management Systems (Theory)

Unit 1: Digital Library Concepts

Historical Development of Digital Libraries; Digital Library Concepts, Institutional Repositories (National & International Initiatives) Digital Library Architectures; Copyright, IPR and other legal issues . Software, Hardware and best practices; Scanners and scanner types; Optical character recognition and comparative study of OCR software.

Unit 2: Digital library software and Digital preservation

Features and comparative study of Greenstone, D-Space, and Eprints; Harvesting Metadata, OAI-PMH and DL. Standards and File formats, Harvesting Metadata, OAI-PMH and DL Interoperability; Harvester software; Digital Resources; strategy for preservation, unique identifiers, Users and user interfaces.

Unit 3: Introduction to CMS

Definition, Benefits; Principles of CMS; CMS Architecture. System and data integration in CMS. Introduction to content management, Content strategy and planning.

Unit 4: Creating and managing Websites

Adding and managing content, Adding managing functionality, Designing principles, best practices Concept of Search Engine Optimization. Word press, Drupal and Joomla.

REFERENCES

Bishop, A. P., Van House, N. A., & Buttenfield, B. P. (Eds.). (2003). *Digital library use: Social practice in design and evaluation*. MIT Press.

Chowdhury, G. G. & Chowdhury, Sudatta. (2003*). Introduction to Digital Libraries*. : Ane Books.

Chowdhury, G. G., & Foo, S. (Eds.). (2012). *Digital libraries and information access: research perspectives*. Facet Publishing.

Deegan, Marilyn & Tanner, S. (2006). Digital Preservation.Facet Publishing.

Fox, Edward; Andre Goncalves, Marcos & Shen, Rao (2012) *Theoretical Foundations for Digital Libraries: The 5SApproach*. Morgan and Claypool

Jones, Richard et al. (2006*). The Institutional Repository*. Oxford: Chandos Publishing.

Judith, Andrews & Derek, Law. (2004*). Digital Libraries*. Ashgate.

Lucy A. Tedd & Andrew Large. (2004). *Digital Libraries : Principles and Practice in a Global Environment*. G.G. Saur.

Purcell, Aaron .(2016). *Digital Library Programs for Libraries and Archives: Developing, Managing, and Sustaining Unique Digital Collections*. ALA

Semester : III

Paper Code : **LIS/3/CC/16**

Paper Name : **Digital Library and Content Management Systems (Practical)**

Unit 1: CMS Practice

CMS and Community Information Systems; document management, records management, digital assets management. Design and Development of Library Website / portal using WordPress; E-content management using Joomla! / Drupal.

Unit 2: DL Practice

DSpace/GSDL.

REFERENCES

Boiko, Bob. (2004). *Content Management Bible* . Wiley.

Casey, Meghan .(2015). *The Content Strategy Toolkit: Methods, Guidelines, and Templates for Getting Content Right*. New Riders

Handley, Ann .(2016). *Everybody Writes: You're Go-To Guide to Creating Ridiculously Good Content*. Mc Millan

Jones, Kyle M. L. & Farrington, Polly-Alida. (2012). *Learning from Libraries That Use Wordpress: Content-Management System Best Practices and Cases*. ALA

Krug, Steve (2015). *Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability*. Pearson.

Norman, Don .(2013).*The Design of Everyday Things*. Basic books

Simon, Carmen .(2016). *Impossible to Ignore: Creating Memorable Content to Influence Decisions*. Mc Graw Hill.

Semester : III

Unit 1 – Knowledge Economy

Features, characteristics, complex nature of knowledge, taxonomy of knowledge; Need for Knowledge Management.

Unit 2 -Knowledge Management-Basics

Meaning and definition of KM; Types of knowledge; KM Systems; Knowledge creation and knowledge architecture – Nonaka's model.

Unit 3 – Knowledge Management-Strategies

Capturing tacit knowledge – methods; Knowledge codification – tools and procedures; Knowledge Mapping; Knowledge testing; Knowledge transfer.

Unit 4 – Knowledge Management System-Tools and Portals

Data visualization; Data mining; Managing knowledge workers. Knowledge Management in Library and Information Centers.

REFERENCES

Anderson, Paul. (2012). *Web 2.0 and beyond : principles and technologies.* CRC Press

Cappelli, Peter. (2010). *The performance effects of it-enabled knowledge management practices*. Cambridge.

Christee Gabour Atwood.(2009). *Knowledge Management Basics*. ASTD Pess.

Dalkir, Kimiz & Liebowitz, Jay (2011). *Knowledge Management Theory & Practice*. MIT Press

Easterby-Smith, Mark & Lyles, Marjorie A. (2011). *Handbook of organizational learning and knowledge management*. Wiley.

Frappaolo, Carl. (2006). *Knowledge Management*. Capstone.

Hislop, Donald. (2009). *Knowledge Management in organization*. Oxford.

Holsapple, Clyde. (2004).*Handbook on Knowledge Management 1: Knowledge Matters*. Springer

Jennex, Murray E. (2008). *Knowledge Management: Concepts, Methodologies, Tools and Applications*. Information Science Reference.

Liebowitz, Jay (2012). *Knowledge Management Handbook: Collaboration and Social Networking*. Taylor and Francis.

Semester : III

Unit 1: WWW: An Overview

Evolution and growth of Web; The Invisible Web; Internet Architecture: H/W & S/W Components, Client/Server Principle, Routers, Connection Types, ISP, Protocols, Uniform Resource Locator, IP Address; Domain Name System; Web servers: Apache etc.

Unit 2: Web Design Principles

Mark-up Languages: SGML, HTML, XML; Web Browsers: Internet Explorer, Mozilla Firefox, and Google Chrome.

Communication Tools: E-mail, Discussion Groups, Social Media Basic principles and practices in developing websites.

Tools and technologies associated to website designing, concept of web browsers-Page design and layout , design concepts , Mark up languages SGML, HTML, XML, CSS , Dream weaver, Web publishing and hosting.

Unit 3: Search Engines

Search Tools: Search Engines and Meta Search Engines; Intranet and Extranet: Components, Prerequisites and Services; Design and evaluation of Search engines.

Unit 4: Web Security

Internet Security: Worms, Viruses, Malware, Spyware, phishing, Cyber Crime: Provision in the Indian IT Act; Firewalls, Anti-Virus, Anti-Spyware.

REFERENCES

Bates, Chris. (2006). *Web Programming: Building Internet Applications*. 3rd Ed. Wiley-India.

Duckett, Jon .(2011). *HTML and CSS: Design and Build Websites Paperback* .Wiley

Hartl, Michael & Prochazka, Aurelius. (2007). *RailsSpace: Building a Social Networking Website with Ruby on Rails*. Addison-Wesley Professional.

Kalbach, James. (2007). *Designing Web Navigation: Optimizing the User Experience*. O'Reilly Media.

Macdonald, Matthew (2015). *Creating a Website: The Missing Manual*. O'Reilly Media.

Morville, Peter & Rosenfeld, Louis. (2006). *Information Architecture for the World Wide Web: Designing Large-Scale Web Sites*. 3rd Ed. O'Reilly Media.

Robbins, Jennifer Niederst. (2012). *Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics*. 4th Ed. O'Reilly Media.

Stallings, William. (2007). *Computer Networking with Internet Protocols and Technology*. Pearson Education.

Semester : III

Paper Code : **LIS/3/DSE/17**

Paper Name : **Integrated Library Management System (ILMS)**

Unit-1: Integrated Library Management System (ILMS)

Definition, need, purpose and advantages. Manual system Vs Automated System: Historical Development of Library Automation; MARC I and MARC-II Project; Retrospectives conversion.

Unit-2: Planning for Integrated Library Management System (ILMS)

Systems analysis for ILMS: hardware, software, technical standards etc.; ILMS software – Proprietary software-Libsys, SLIM++, Easylib, and FOSS (Free and Open Source Software) – Koha, NewGenLib, E-Granthalaya, ABCD.

Unit - 3: Areas of ILMS
Acquisition, Cataloguing, Copy cataloguing from LOC, Wordcat, IndCat, Access to Catalogue (OPAC), WebOPAC, Circulation Section, and Serial Control system; Integration of ILL in ILMS; Trends in ILMS.

Unit – 4: Barcode Technology and RFID
Meaning, need, purpose and advantages. Types of barcodes : Dumb / Generic barcode and smart barcode – their application. RFID and its adoption and implementation; QR Code Technology; Data Integrate and security in ILMS.

REFERENCES

Cohn, John M.; Kelsey, Ann L & Fiels, Keith Michael. (1998*). Planning for library automation: A Practical Handbook*. Library Association,

Cohn, John M; Ann L. Kelsey & Keith Michael.(1998).*Fiels: Planning for library automation: A Practical Handbook.* Library Association.

Cooper. Michael D. (1996). *Design of Library Automation System: File Structure, Data Structures and Tools*John Wiley.

David Lankes R. et. al. (eds.)(2002). *Implementing Digital Reference Services Setting Standards and making it real.* Facet.

Goodman, Amanda L. (2014). *Digital Media Labs in Libraries*. American Library Association.

Hilal Ahmed. (2016*). Integrated Library Management Systems: An Indian Scenario of Modern Library Automation* . Ess Ess .

Jost, Richard M. (2016). *Selecting and Implementing an Integrated Library System: The Most Important Decision You Will Ever Make*. Chandos Publishing,

Judy, Brooks. (2014). *Practical Systems Analysis in Library Automation and Management.* Koros Press Limited

Kochan, R. S. & K. N. Sudarshan. (1997). *Library Automation*. APH.

Marshall, Breeding. (2016). *Library Technology Buying Strategies*. American Library Association.

Nicole, Hennig. (2014). *Apps for Librarians: Using the Best Mobile Technology to Educate*, *Create, and Engage*. Libraries Unlimited.

Reynolds, Dennis. (1985). *Library automation: Issues and applications*. Bowker.

Webber, Desiree & Peters, Andrew. (2016*). Integrated Library Systems: Planning, Selecting, and Implementing*, Libraries Unlimited.

William , Saffady. (1999). *Introduction to Automation for Librarians*. ALA

Semester : III

Paper Code : **LIS/3/DSE/18**

Paper Name : **Academic Library System**

Unit 1: Academic Libraries: Functions and Services

Role of Academic Libraries in Higher Education; Academic Library Services; Academic Library Management; Role of UGC for Academic Library Development.

Unit 2: Resource Development

Information / Intellectual Resources; Physical Resources including ICT Infrastructure; Human & Financial Resource.

Unit 3: Staff Development and Continuing Education

Staffing Norms and Standards; Continuing Education Program for Academic Libraries; Personnel Management.

Unit 4: Library Networks and Consortia

INFLIBNET- Objectives, Functions and Services; MHRD/UGC-INFLIBNET Initiatives for Academic Library Development: *e-Shodh Sindhu* /and N-LIST.

REFERENCES

Box, Kausik. (1991*). Information Networks in India: Problems and Prospects*. EssEss.

Cowley, John. (1982). *Personal Management in Libraries*. Clive Bingley.

Dale, Penny; Beard, Jill & Holland, Matt (2016). *University Libraries and Digital Learning Environment*. Ashgate.

Evans, G E.(1983). *Management Techniques for Librarians*. Academic Press.

Gelfand, M A. (1974). *University Libraries for Developing Countries*. University Book and Stationery.

Girja Kumar. (1987*). Library Development in India*. Vikas.

Gurdev Singh. (2015). *Academic Library System and Services*. ESS ESS.

Hingwe, K S. (1982). *Management of University Libraries in India*. The World Press.

Kent, A & Galvin, TJ. (1979). *The Structure and Governance of Library Networks*. New York: Marcel Dekker.

Krishan Kumar. (1987). *Library Administration and Management*. Vikas.

McDonald, Joseph & Micikon, Basney. (1994). *Academic Libraries: The Dimensions of their Effectiveness*. Greenwood Press.

McKee, Bob. (1989). *Planning Library Service*. Clive Bingley.

Mittal, R L. (1993). *Library Administration: Theory and Practice*. Metropolitan.

Ranganathan, S R. (1989). *Library Book Selection*. Sarada Rangnathan Endowment for Library Science.

University Grants Commission. (1993). *Report of the curriculum Development Committee in Library and Information Science*. New Delhi: UGC.

Semester : III

Paper Code : **LIS/3/DSE/18**

Paper Name : **Special Library System**

Unit 1: Special Library: Functions and Services

Types of Special Libraries; Special Library Management; Role of CSIR, ICAR, ICMR, DRDO, ICSSR etc.

Unit 2: Special Library Services

Reference and Referral, Alert services, Web based services.

Unit 3: Resource Planning and Development

Information / Intellectual Resources; Physical Resources including ICT Infrastructure; Human Resources and Manpower planning; Financial Resource; Planning of Technical Information Units / centers.

Unit 4: Library Networks and Consortia

Mission oriented networks and consortia with special emphasis on India.

REFERENCES

Matarazzo , James M .(2013). *Toby Pearlstein Special Libraries: A Survival Guide* . Libraries Unlimited**.**

Mishra R. K. (2013) *Special Library System and Information Services*. Anmol.

Mount, Ellis, & Renée Massoud. (1999) *Special Libraries and Information Centers: An Introductory Text*. . Washington, DC: SLA Publishing,

Semertzaki,   Eva (2011). *Special Libraries as Knowledge Management Centres*, Chandos Publishing.

Shumaker, David. (2011). Special Libraries. *In Encyclopedia of Library and Information Sciences,* New York: Taylor and Francis.

Paper Code : LIS/3/DSE/18

Paper Name : Public Library System

Unit 1: Public Library: Functions and Services

Role of Public Libraries: Public Library as Knowledge Centers; Changing Dimensions of Public Library Services; Public Library Management; Organizational Structure of Public Library system; Role of UNESCO, IFLA, RRRLF, NKC, NLM, IPLM.

Unit 2: Resource Development

Information / Intellectual Resources; Physical Resources including ICT Infrastructure; Human & Financial Resources; Resource Mobilization in Public Library; Library Legislation in India.

Unit 3: Public Library Services

Public Library as community information centre; Web-Based Public Library Services.

Unit 4: Public Libraries: Trends and Development

ICT Application in Public Libraries; Resource Sharing and Networking.

REFERENCES

American Library Association. (1967). *Minimum Standards for Public Library Systems. Chicago*. ALA.

Barua, B P. (1992). *National Policy on Library and Information Systems and Services for India: Perspectives and Projections*. Popular.

Batt, Chris. (1998). *Information Technology in Public Libraries*. Library Association.

Corbett, E V. (1978). *Fundamentals of Library organization and Administration*. New York: Oxford IBH.

Gardner, F M. (1971). *Public Library Legislation: A Comparative Study*. UNESCO.

Gates, J K. (1990). *Introduction to Librarianship*. Neal-Schuman.

IFLA. *IFLA Guidelines for Public Libraries*. The Hague: IFLA

IFLA. *The Public Library Service: IFLA/UNESCO Guidelines for development*.

Martin, Lowell A. (2003). *Enrichment: A history of the Public Library in the United States in the Twentieth Century*. Scarecrow.

McClure, Charles R. & Jaeger, Paul T. (2009).*Public Libraries and Internet Service Roles: Measuring and Maximizing Internet Services*.ALA

Murison, W J. (1988). *The Public Library: Its origin, purpose and significance*. Clive Bingley.

Patel, Jashu & Krishan Kumar (2004). *Libraries and Librarianship in India*. Westport: Greenwood

Ranganathan, S R. (1959). *Library Administration*. Bangalore: SRELS.

Shera, Jesse H. (1965). *Foundations of the Public Library: The Origins of the Public Library Movements in New England* (1629-1855). Shoestring Press.

Venkatappaiah, V. (1990). *Indian Library Legislation. Vol.I&II Union Library Bills and Acts*. Daya Publishing House.

White, Horbert S. (1985*). Library Personnel Management*. Knowledge Industry Publications.

Semester : III

Paper Code : **LIS/3/OE/19**

Paper Name : **Intellectual Property Rights**

Unit 1: Intellectual Property Rights

Meaning and scope; Categories of IP.

Unit 2: International Treaties on IPR

Berne Convention; Universal Copyright Convention; Stockholm Conference; Paris Conference; WIPO Copyright treaty; GATT; TRIPS.

Unit 3: National Laws

Copyright law of India and its amendments; Fair use provision; Patent law of India and amendments; Other Laws related to IPR.

Unit 4: Implications of IPR

Protection of web-based content; Copyright and libraries; Copy left movement; Creative Commons; Plagiarism.

Unit 5: Open Access movement

History of open access movement, approaches to open access, Stake holders of OA, policies and guidelines. Open access journals and repositories.

REFERENCES

Agnew, Grace .(2008). *Digital Rights Management: A Librarian's Guide to Technology and Practise*.Chandos

Andrew Murra. (2010).*Information Technology Law: The law and society*. Oxford.

Choux, Deborah E. Bo. (2012). *Intellectual Property: The Law of Trademarks, Copyrights, Patents, and Trade Secrets* . Cengage.

Correa, Carlos M. & Yusuf, Abdulqawi A. (2008). *Intellectual Property and International Trade: The TRIPS Agreement* . Oxford.

Fishman, Stephen. (2008). *The copyright handbook: what every writer needs to know*. Berkeley. Nolo.

Freeman, Lee & Peace, A. Graham. (2005). *Information ethics: privacy and intellectual property*. Information Science Pub.

Jessica, Littman. (2001). *Digital Copyright: Protecting Intellectual Property on the Internet*. Prometheus.

May, Christopher .(2007). *Digital Rights Management: The Problem of Expanding Ownership Rights*. Chandos

Much, Jude C. (2008). Trade Marks and Copyright for Dummies. Amazon.com. The World beyond Digital Rights Management. Wiley.

Munari, Federico & Oriani, Raffaele. (2011). *The Economic Valuation of Patents: Methods and Applications*. Edward.

YiJun Tian & Jane Winn. (2008). *Re-thinking Intellectual Property: The Political Economy of Copyright Protection in the Digital Era*. Routledge.

Semester : III

Paper Code : **LIS/3/OE/20**

Paper Name : **Electronic Publishing**

Unit 1: Basics of Electronic Publishing

History of scholarly publishing; Types of e-publications; Migration of peer reviewed journals from print to Web-based; Role of the Internet in access to scholarship; Digital publishing as a catalyst to interdisciplinary communication; Peer review process; Archival options for short and long term preservation; Software options for managing peer review Publications.

Unit 2: Stakeholders of Electronic Publishing

Universities, research institutions, university presses; Libraries and commercial publishers in scholarly communication; Newspapers and the transformation of journalism. Open Access Publishing; Large scale digitization projects at the international level.

Unit 3: Economics of Scholarly Publishing

Economics of digital publishing -- different models; Funding agencies; Copyright: The rights of publishers, authors, and readers; Protecting copyright vs. Creative Commons.

Unit 4: E-Publishing Technology

Hardware and software, DTP software.

REFERENCES

Gastel, Barbara & Day, Robert A. (2016). *How to Write and Publish a Scientific Paper*. Greenwood.

Rose, M. J. & Adair-Hoy, Angela . (2011*). How to Publish and Promote Online Paperback Rose*.St. Martin's Griffin.

Singh, Vishnu P. (2015). *Simplified Desktop Course Book Paperback*. Asianbooks.

Spring, Michael B (1991). *Electronic printing and publishing: the document processing   revolution*. Dekker.

Semester : IV

Paper Code : **LIS/4/CC/21**

Paper Name : **Information Retrieval**

Unit 1: Basic concepts of Information Retrieval

Overview of IR systems; Historical Perspectives; Measures of Performance and Evaluation.

Unit 2: Introduction to DBMS

File management vs. Database management, integrity and security issues. E-R Models; Logical Database Design, Relational and Object Oriented Database Models, Normalization. SQL, Implementation in MySql or PostgreSql.

Unit 3: Indexing Systems and Techniques

Assigned Indexing vs Derived Indexing : Pre and Post Coordinate Indexing ; Citation Indexing.

Unit 4: IR Models

Boolean, Vector and Probabilistic Models; Alternative IR Models: set theoretic, algebraic models, and probabilistic models (Bayesian networks). Structured Text Retrieval Models: model based on non-overlapping lists and proximal nodes. Text Operations: document pre-processing (word stemming, stop words, thesauri), document clustering.

Unit 5: Information Search

Searching vs. browsing; dynamic query formulation: keyword based querying, pattern matching, structural queries, query protocols; Hybrid, statistical and knowledge approaches: query expansion and refinement based on similarity measures; Designing End User Interface Database searching Practice.

REFERENCES

Aitchison, Jean; Gilchrist, Alan; and Bawdown, David. (1990). *Thesaurus Construction and Use: Practical manual*. 4th Ed. ASLIB.

Becker, Joseph & Hayes, Robert M. (1967). *Information Storage and Retrieval tools Elements &Theories*. New York: John Wiley.

Chowdhury, G G .(2010). *Introduction to Modern Information Retrieval*. Facet Publishing

Elis, David(1996). *Progress and Problems in Information Retrieval*. Library Association.

Fosket, A.C.(1992). *Subject Approach to Information*. Clive Bingley.

Fugman, Robert. (1993). *Subject Indexing and Analysis Theoretical Foundations & Practical Advice.* Index Verlag.

Grolier, Eric de. (1962). *A Study of general Categories Applicable to Classification and Coding in Documentation*. UNESCO.

Lancaster, F.W. (1977). *The Measurement and Evaluation of Library Science*. Information Sources Press.

Losee, Robert M. (1998). *Text retrieval and Filtering: Analytical Models of Performance*. Kluwer.

Meadow, Charles T. (2000). *Text Information retrieval system*. Academic Press.

Sharp, Harold S. (1964). *Readings in Information Retrieval*. The Scarecrow Press.

Soergel, Dagobert. (1974). *Indexing Languages & Thesaurus Construction & Maintenance*. Melville Pub. House.

Soergel, Dagobert. (1985). *Organizing Information. Principles of Database & Retrieval Systems*. Academic Press.

Paper Code : **LIS/4/CC/22**

Paper Name : **Research Methods**

Unit 1: Research: meaning and types

Concept, Meaning and Process of Research; Types of Research.

Unit 2: Research Design

Types of research design; Identification and formulation of problem; Hypothesis; Designing research proposal; Ethical aspects of research; Literature search: print, non-print and electronic sources; Literature Review.

Unit 3: Research Methods

Scientific Method; Historical Method; Descriptive Method; Survey and Case Study Method; Experimental Method and Delphi Technique; Bibliometrics, Informetrics, Scientometrics, Webometrics and Altmetrics.

Unit 4: Data Collection, Analysis and Interpretation

Collection of Data by Questionnaire, Interview, Observation and Sampling; Presentation of Data-Tables, Charts and Graphs; Interpretation of Data: Frequency Distribution, Measures of Central tendency, Analysis of Time Series, Co-relation Studies and Analysis of Variance; Regression Analysis; Use of Statistical Packages.

Unit 5: Research Reporting

Structure, style, contents; Guidelines for research reporting; Style manuals; Reference management software; Methods of research evaluation. Current Trends in Library and Information Science Research.

REFERENCES

Booth, W. C., Williams, J. M. & Colomb, G. G. (2003). *The Craft of Research*. University of Chicago Press.

Brady, John. (1997). *The Craft of Interviewing*. Vintage.

Gilliam, Bill. (2000). *The Research Interview*. Continuum Press.

Kish, Leslie. (1995). *Survey Sampling*. Wiley.

Marshall, Catherine & Rossman, Gretchen B .(2006). *Designing Qualitative Research*. Sage.

Nielsen, Jakob. (2000). *Designing Web Usability*. New Riders.

Patterns Rea, Louis M & Parker, Richard A. (2005). *Designing and Conducting Survey Research.* Jossey-Bass.

Reinard , John C. (2006). *Communication Research Statistics*. Sage, USA.

Row tree, Derek. (2003). *Statistics without Tears: A Primer for Non-Mathematicians*. Penguin.

Rubin, Herbert and Irene (2004). *Qualitative Interviewing: The Art of Hearing Data*. Sage, USA.

Sudman, Seymour (1976). *Applied Sampling.* Academic Press.

Wadsworth, Yoland . (1998). *Everyday Evaluation on the Run: A collection of simple methods for evaluating the success of any project*. Allen & Unwin.

Williams, Frederick & Monge, Peter. (2001). *Reasoning with Statistics*. Harcourt.

Willis, Gordon B. (2004). *Cognitive Interviewing: A Tool for Improving Questionnaire Design*. Sage .

Semester : IV

Paper Code : **LIS/4/CC/23**

Paper Name : **Dissertation / Project and Viva-Voce**

Every Student has to carry out a project work on a topic approved by the Departmental Council, under the guidance of a faculty member and prepare a Dissertation / Project Report. Student should make a presentation and appear for a Viva-Voce for evaluation and Grading.

Semester : IV

Paper Code : **LIS/4/DSE/24**

Paper Name : **Informetrics and Scientometrics**

Unit 1: Informetrics

Genesis, scope and definition; Librametry, Bibliometrics, Scientometrics & Webometrics; Bibliometrics laws: Zip's law, Lotka's law, Bradford's Law of Scattering; Bookstein, Garfield, Price laws.

Unit 2: Growth and Obsolescence of Literature

Various growth models; Aging factor and half-life.

Unit 3: Application of Bibliometrics

Citation analysis: Bibliographic Coupling and Co-citation Analysis; Science indicators: Impact factor, h-index, g-index, i-10 index.

Unit 4: Trends and Developments

Current trends and developments in Informetrics and Scientometrics; Software for bibliometric analysis with emphasis on Open sources software.

REFERENCES

Almind, T C & Ingwersen, P. (1997) Informetric analysis of World Wide Web: Methodological approaches to webometrics. *Journal of Documentation*, 53(4).412-420.

Andres, Ana. (2009). *Measuring academic research: How to undertake Bibliometric Study.* Oxford.

De Bellis, N. (2009). *Bibliometrics and citation analysis: From the Science Citation Index to Cybermetrics*. Scarecrow press.

Egghe, L & Rousseau, R.. (1990*). Introduction to Informetrics: Quantitative methods in library, documentation and information science*. Elsevier Science.

Egghe, L. (2006). Theory and practice of the g-index. *Scientometrics* . 69(1): 131-152

Egghe, L. (2010). *The Hirch Index and related impact measures.* ARIST, Vol.44, 65-114.

Hertzel, Dorothy H. (2003). *Bibliometric history*. *In* Encyclopeadia of Library & Information science. Ed.2. Vol. 1. Miriam A. Drake. Ed. New York: Marcel Dekker Inc.

Lancaster, F W. (1991). *Biblometric methods in assessing productivity and impact of research*. SRELS

Mahapatra, Gayathri .(2009). *Biblometric studies: In the electronic era*. Indiana Books

Moed, H F. (2000). *Citation Analysis in research evaluation*. Springer.

Ravichandra Rao, I K (1985). *Quantitative methods of Library & Information science*. Wiley.

Ravichandra Rao, I K. (2010). *Growth of Literature and measures of scientific productivity: Scientometric models*. Ess Ess.

Srivarthava, Ranjana. (2010). *Biblometrics : New Dimensions and latest trend*. Alpha Publication.

Sudhier, K.G. (2017). *Informetric studies*. B R Publishing Corporation

Vinkler, P. (2010). *The evaluation of research by scientometric indicators*. Oxford: Chandos Publishing.

White, Howard D & Mc Cain, Katherine (1989). *Biblometrics*. In William, Martha E. Ed. ARIST, Vol. 24. Amsterdam: Elsevier science pub.

Wilson, C S. (1999) *Informetrics*. In Williams, M E. Ed., ARIST, Vol.34. Medford: Information Today.

Semester : IV

Paper Code : **LIS/4/DSE/24**

Paper Name : **Health Information Systems**

Unit 1: Health information

Categories of users and their needs; Overview of Health information stakeholders.

Unit 2: Information sources

Documentary and Institutional sources.

Unit 3: Information products and services

MEDLARS, PubMed, EMBASE, Medical Information Resources and services in India, National Medical Library (India).

Unit 4: Trends and Developments

Current trends and Development in Health information systems and services.

REFERENCES

Balgrosky, Jean A .(2015*). Essentials of health information systems and technology*. Jones & Bartlett.

Dixon, Brian .(2016). *Health Information Exchange : Navigating and Managing a Network of Health Information Systems*. Academic Press.

Kourouthanassis, Panos & Giaglis, George M .(2008).*Pervasive information systems*. Armonk.

Kushniruk, Andre W & BoryckiHuman, Elizabeth (2012). *Social, and organizational aspects of health information systems*.Hershey

McGlynn, Elizabeth A ; Brook, Robert H & Kerr, Eve A .(1999).*Health Information Systems : Design Issues and Analytic Applications*.Rand

Michelsen, Kai.(2015).*Promoting better integration of health information systems : best practices and challenges*. WHO

 O'Carroll, Patrick W. (2010). *Public health informatics and information systems*. Springer.

Rodrigues, Joel. (2010).*Health information systems : concepts, methodologies, tools, and applications*.Hershey

Skurka, Margaret Flettre.(2017). *Health information management : principles and organization for health information services*. Wiley

Winter, Alfred .(2013). *Health information systems*.Springer

Semester : IV

Paper Code : **LIS/4/DSE/24**

Paper Name : **Agriculture Information Systems**

Unit 1: Agriculture information

Categories of users and their needs; Overview of Agriculture information stakeholders.

Unit 2: Information sources

Documentary and Institutional sources.

Unit 3: Information products and services

AGRIS, USDA, Agriculture Information Resources and services in India; CeRA (Consortium for e-Resource in Agriculture).

Unit 4: Trends and Developments

Current trends and Development in Agriculture information systems and services.

REFERENCES

FAO, *Agricultural information & documentation systems*.

Garforth, C. (2001). *Agricultural knowledge and information systems in Hagaz, Eritrea*. SD Dimensions.FAO

Leeuwis, C. (2004). *Communication for rural innovation: rethinking agricultural extension.* Blackwell Science.

Leeuwis, C., Long, N. & Villarreal, M. (1991). *Equivocations on knowledge systems theory: an actor-oriented critique*. In Kuiper, D. & Röling, N.G. (Eds). Edited Proceedings of the European Seminar on Knowledge Management and Information Technology. Wageningen, The Netherlands: Agricultural University.

Naidoo, G. & Rolls, M.J. (2000). A method to investigate agricultural information use by small-scale Mauritian cattle keepers. *Journal of Agricultural Education and Extension, 7(1)*

Otsuka, Keijiro. Kalirajan K P.(2008). *Agriculture in developing countries: technology issues*. Sage

Ramirez, R. (1997). *Understanding farmers' communication networks: combining PRA with agricultural knowledge systems analysis*. International Institute for Environment and Development

Röling, Niels G (1988).*Extension science : information systems in agricultural development*. Cambridge University Press

Sharma, C D & Ojha D C (1989) *Information systems: agriculture and environment*.RBSA.

Spedding, C.R.W. (1988). *An introduction to agricultural systems.* (2nd. ed). Elsevier Applied Science.

Semester : IV

Paper Code : **LIS/4/DSE/24**

Paper Name : **Industrial Information Systems**

Unit 1: Industrial information

Categories of users and their needs; Overview of Industrial Information stakeholders.

Unit 2: Information sources

Documentary and Institutional sources.

Unit 3: Information products and services

UNIDO, Industrial Information Resources and services in India, SENDOC.

Unit 4: Trends and Developments

Current trends and Development in Industrial information systems and services.

REFERENCES

Chakrabarty (2010).*Management Information System for Industrial Safety*, Health and Environment Hardcover.

Los Alamitos, CA, 1992. *Information Systems and Decision Processes*, E. A. Stohr and B. R. Konsynski, IEEE Computer Society Press.

Thomas Boucher (2006). *Design of Industrial Information Systems*, MA, 432 pages, Ali Yalcin Academic Press, Burlington.