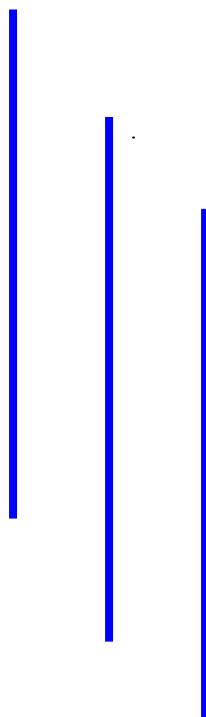


**REVISED SYLLABUS FOR MASTER OF LIBRARY AND
INFORMATION SCIENCE (MLISc.) UNDER CHOICE BASED
CREDIT SYSTEM (CBCS)**

2013



**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE
NORTH EASTERN HILL UNIVERISTY
SHILLONG, MEGHALAYA**

1. Objectives

- (a) To impart professional education and training to the students in organisation and management of different types of libraries and information centres.
- (b) To provide understanding of the basic principles and laws of Library and Information Science to the students and enable them to appreciate the functions, purposes and services of the library profession.
- (c) To train the students in organisation, retrieval and dissemination of information using latest relevant technology, particularly information technology in order to meet the challenges of the present-day Knowledge Society.
- (d) To facilitate research in the field of Library and Information Science.

2. Admission Requirements

Candidates seeking admission to the course shall satisfy the conditions laid down by the University and notified before the commencement of each session from time to time.

3. Examinations

As per University rules and regulations notified from time to time.

4. Course Structure

The MLISc. Syllabus consists of **72 Credits** spreading over **18 Courses**. Each Credit (1 Credit= 25 marks) will have **12 contact hours of teaching for theory** and **24 contact hours of teaching for practical**. Out of 72 Credits, **60 Credits are assigned to the Core Courses** and **12 Credits are assigned to the Open Courses**. It is a must that a student earns **12 Credits from the Open Courses**. A student can choose **any three Open Courses** either from those Open Courses offered by the Department or offered by any other Department across the University during the **2nd** and the **3rd Semesters**.

| | | | |
|-----------|--|------------------|-------------|
| | I SEMESTER | | |
| LIS-C 101 | Foundations of Library and Information Science | 4 Credits | |
| LIS-C 102 | Knowledge Organization –I (Theory) | 4 Credits | |
| LIS-C 103 | Knowledge Organization -I(Practice) | 4 Credits | |
| LIS-C 104 | Information Sources and Services | 4 Credits | |
| LIS-C 105 | Foundation of Computer Application | 2 Credits | |
| | II SEMESTER | | |
| LIS-O 201 | System Analysis and Design | 4 Credits | Open |
| LIS-C 202 | Knowledge Organization II (Theory) | 4 Credits | |
| LIS-C 203 | Knowledge Organization II (Practice) | 4 Credits | |
| LIS-C 204 | Library Software Packages (Theory and Practice) | 4 Credits | |
| LIS-C 205 | Library Housekeeping Operations | 2 Credits | |
| | III SEMESTER | | |
| LIS-C 301 | Information Retrieval | 4 Credits | |
| LIS-C 302 | Research Methodology | 4 Credits | |
| LIS-C 303 | Collection Development | 2 Credits | |
| LIS-O 304 | Database Management System | 4 Credits | Open |
| LIS-O 305 | Information Communication Technology | 4 Credits | Open |
| | IV SEMESTER | | |
| LIS-C 401 | Management of Library and Information Systems | 4 Credits | |
| LIS-C 402 | Digital Libraries | 4 Credits | |
| LIS-C 403 | E- Learning and Content Management System (Theory and Practice) | 4 Credits | |
| LIS-C 404 | Information Sources and Services (Practice) | 2 Credits | |
| LIS-C 405 | Dissertation | 4 Credits | |

LIS-C 101: FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE

Objective: *This paper aims at familiarizing the students with the basic concepts, systems and services of libraries and information centres.*

Unit I

Nature and Scope of Library and Information Science; Types, Activities and Services of Libraries: Public, Academic, Special and National Libraries; Five Laws of Library Science and their Implications; Concept and Types of Information Systems: INIS, AGRIS, ENVIS, NASSDOC, DESIDOC, NISCAIR, INFLIBNET.

Unit II

Information Society: Concept and Features; Information Economics and Economics of Information; Information and National Development; Right to Information (RTI); Information Literacy: Concept and Models.

Unit III

Library Legislation in India with Special Reference to North East India; Library Extension Services: Concept and forms; Community Information Services: Concept and Forms; Intellectual Property Rights (IPR)- Concept and Types.

Unit IV

Library Profession- Characteristics and Ethics; Professional Associations in Library and Information Science and their Activities: IFLA, ILA, ASLIB, IATLIS, etc. Library and Information Activities of Professional Organizations: UNESCO, RRRLF, National Knowledge Commission (NKC).

Core Readings

1. American Library Association. (2003). *Information policies: A compilation of position statements, principles, statutes and other pertinent statements*. Chicago, ALA
2. Bauer, Patricia. (2000). *Foundations of library and information science*. New York, Neal-Schuman
3. Borgman, Christine. L. (2003). *From Gutenberg to the global information infrastructure: Access to information in the networked world*. Cambridge, MIT Press
4. Brown, John, Seely, et al. (2002). *The social life of information*, Boston, Harvard Business School Press
5. Chopra, Hans Raj. (1989). *Librarianship: As a profession*, Jodhpur, Jain Brothers

6. Feather, John (2000). *The information society: A study of continuity and changes (3rd edition)*, London, Facet Publishing
7. Hamilton, Buffy. J. (2012). *Embedded librarianship: Tools and practices*, Chicago, ALA TechSource
8. Matthews, Duncan. (2013). *Globalising intellectual property rights: The TRIPs agreement*, New York, Routledge
9. Ranganathan, S. R. (1988). *The five laws of library science*. New Delhi, Sarada Ranganathan Endowment for Library Science
10. Richard, Rubin. E. (2000). *Foundations of library and information science*, New York, Neal-Schuman
11. Rockman, Ilene. F. (2004). *Integrating information literacy into the higher education curriculum: Practical models for transformation*, Michigan, Jossey-Bass
12. Venkatappaiah, Velaga. (1994). *Model library legislation: Model Public Library Act and rules made therein for the constituents States and Union Territories*, New Delhi, Concept Publishing Co.

Additional Readings

1. Agarwal, U. K. (1999). *Twentieth century: Library legislation in India*, Udaipur, Shiva Publishers.
2. Carlson, Christ, & Brosnahan, Ellen. (2008). *Guiding students into information literacy: Strategies for teachers and teacher-librarians*. USA, Scarecrow Press
3. Crawford, Walt. (1998). *Being analog: Creating tomorrow's libraries*, Chicago, American Library Association
4. Ismail, Abdullah. (2009). *Global library and information science: A text book for students and educators with contributions from Africa, Asia, Australia, New Zealand, Europe, Latin America and the Caribbean, the Middle East and North America*, New York, Walter de Gruyter
5. Kesselman, Martin. Alan, & Weintraub, Irwin (Eds.) (2010). *Global librarianship*, New York, Marcel Dekker Inc.
6. Leckie, Gloria J, Given, Lisa M, & Buschman, John E (2010). *Critical theory for library and information science*, California, Libraries Unlimited
7. Maskus, Keith. E. & Bergsten, C. F. (2000). *Intellectual property rights in the global economy*, Washington DC, Institute for International Economics
8. Panella, Deborah, & Mount, Ellis (2012). *Basics of law librarianship*, New York, Routledge
9. Ramage, Magnus, & Chapman, David. (Eds.). (2011). *Perspectives on information*, New York, Routledge Chapman & Hall
10. Shontz, Priscilla K, et al (2002). *Jump start your career in library and information science*. New York, Scarecrow Press
11. Smith, David. (1981). *Systems thinking in library and information management*. New York, World Christian Encyclopaedia
12. UNESCO. (1960). *National libraries: Their problems and prospects*, Paris

LIS-C 102 KNOWLEDGE ORGANISATION-I (Theory)

***Objective :** To introduce the structure and features of Universe of Knowledge and to understand the principles and practices of document description.*

(a) Classification

Unit I

Library Classification: need, purpose and principles; Universe of Knowledge and formation of subjects; structure of Dewey Decimal Classification and Colon Classification schemes.

Unit II

Idea plane: canons, principles and postulates; fundamental categories.
Verbal plane: canons and principles.

(b) Cataloguing

Unit III

Library cataloguing: need, purpose and principles; forms and types of catalogue; kinds of entries and elements of description.

Unit IV

Subject catalogue: Sears List of Subject Heading (SLSH), Library of Congress Subject Heading (LCSH), chain indexing. Structure of Anglo American Cataloguing Rules II and Classified Cataloguing Code.

Core Readings:

1. Bowman, J.H. (2003). *Essential cataloguing*. London: Facet.
2. Broughton, Vanda. (2004). *Essential classification*. London: Facet Publishing.
3. Buchanan, Brian (1979). *Theory of library classification: an introduction*. New York: McGraw Hill.
4. Chan Lois Mai (1994). *Cataloguing and classification: an introduction*. New York: McGraw Hill.
5. Krishan Kumar (2000). *Theory of cataloguing*. New Delhi: Vikas Publication.
6. Krishan Kumar (2000). *Theory of classification*. New Delhi: Vikas Publication.
7. Maltby, A. (1972). *Classification in the 1970s*. London: Clive Bingley.
8. Needham, C.D. (1974). *Organising knowledge in libraries*. London: Andre Deutsch.

9. Ranganathan, S.R. (1989). *Elements of library classification*. (3rd.ed.). Bangalore: Sarada Ranganathan Endowment.
10. Ranganathan, S.R. (1989). *Prolegomena to library classification*. (3rd. Ed.). Bangalore: Sarada Ranganathan Endowment.

Additional Readings:

1. Carter, R.C. ed. (2001). *Managing cataloguing and the organisation of information: philosophies and challenges at the onset of the 21st century*. New York: Haworth Press.
2. Cole, Jim and Jones, Wayne ed. (2002). *E-serials cataloguing*. New York: Haworth Press.
3. Dhiman, A.K. & Yashoda Rani. (2005). *Learn library classification*. New Delhi: Ess Ess.
4. Kao, Mary L. (2001). *Cataloguing and classification for library technicians* (2nd Ed.). New York: Haworth Press.
5. Kao, Mary L. (2003). *Cataloguing and classification for library personnel*. Mumbai: Jaico.
6. Kumar, P.S.G. (2003). *Knowledge organisation, information processing and retrieval theory*. Delhi: B.R. Publishing.
7. Rowley, Jennifer and Farrow, John (2000). *Organising knowledge: an introduction to knowledge managing access to information*. London: Gower Publications.
8. Singh, Sonal. (1998). *Universe of knowledge: Structure and development*. Jaipur: Raj Publishing.
9. Sood, S.P. (1998). *Universe of knowledge and universe of subjects*. Jaipur: G.Star Printers.
10. Taylor, A.G. (2007). *Introduction to cataloguing and classification* (10th edition). New Delhi: Atlantic.

LIS – C 103: KNOWLEDGE ORGANISATION-I (Practice)

***Objectives:** To develop skills in subject analysis and proficiency in using standard schemes of classification and subject cataloguing ; to develop ability in applying methods and tools of content description.*

(A) Classification

Classification of documents by Dewey Decimal Classification (available edition) and Colon classification (available edition) in the following graded steps:

Unit I

Classification of documents having “simple subjects”

Unit II

Classification of documents having “compound subjects”

(B) Cataloguing

Practical cataloguing of books according to Anglo-American Cataloguing Rules - 1988 edition with amendments 1999, 2002. Assigning subject heading using Sears List of Subject Heading in the following graded steps:

Unit III

Works of personal authorship; Works of shared authorship; Works of Mixed responsibility.

Unit IV

Anonymous works; Works of corporate authorship and Analytical.

Additional Readings

1. Comaromi, J.P., Warren, M.J. & Dewey, Melvil. (1982). *Manual on the use of the Dewey decimal classification*. Forest Press.
2. Dhyani, Pushpa. (2006). *Classifying with Dewey decimal classification*. New Delhi: Ess Ess.
3. Kaula, P.N. (1985). *A treatise on colon classification*. New Delhi: Sterling Publishers.
4. Khan, M.T.M. (2005). *Dewey decimal classification*. New Delhi: Shree Publishers.
5. Krishan Kumar (1986). *An introduction to cataloguing practice*. (3rd Rev. ed.). New Delhi: Vikas Publishing.

6. Mary, Mortimer. (2007). *Learn Dewey decimal classification* (Ed. 22). Friendswood, US: Total Recall Publications.
7. Satija, M.P. (1995). *Manual for practical colon classification*. (Rev. ed. 3). New Delhi: Sterling Publishers.
8. Satija, M.P. (2004). *Exercises in the 22nd ed. Of Dewey decimal classification*. New Delhi: Ess Ess.
9. Singh, S.N. & Prasad, H.N. (1985). *Cataloguing manual AACR-II*. Delhi: B.R. Publishing.

LIS-C 104 : INFORMATION SOURCES AND SERVICES

Objective : – *This paper, helps identify various information users, their information needs and information seeking behavior and the sources of information best suited for each group.*

Unit I

Information– Concepts; Life Cycle; Characteristics; Compilation and Dissemination; Primary, Secondary and Tertiary Sources (Print and Non-Print Formats) –Concepts; Characteristics and Uses

Unit II

Reference Service – Concepts; Scope; Modes; Enquiry Techniques; Information Searching Techniques From Print and Electronic Sources

Referral Services; Document Delivery Services; Translation Services –Concepts; Scope and Usefulness

Qualifications, Qualities, Duties and Role of Reference Staff

Unit III

Information Needs and Information Seeking Behaviour of Users – History; Concepts and Characteristics

Models of Information Seeking Behaviour – Models by Wilson; Dervin; Kulhthau and Ellis

Information Sources and Services in the Humanities; Social Sciences; Sciences; Business and Law

Unit IV

User Studies – History; Concepts; Goals; Objectives; Methodology and Case Studies
User Education – Concepts; Goals; Objectives; Role and Techniques

Core Readings

Connor, E. (Ed.).(2006) *An introduction to reference services in academic libraries*. New York: Haworth Information Press.

- Katz, b. (Ed.). (2003). *Digital reference services*. Binghamton, NY: Haworth Information Press.
- Nast, P. (Ed.). (2008). *Virtual reference service : From competencies to assessment*. New York: Neal-Schuman Publishers.
- Nicholas, D. (2000). *Accessing information needs: Tools, techniques and concepts for the internet age* (2nd ed). London: ASLIB.
- Novotny, E. (Ed.). (2006). *Assessing reference and user services in a digital age*. Binghamton, NY: Haworth Information Press.

Additional Readings

- Case, D.O. (2002). *Looking for Information: A survey of research on information seeking, needs and behaviour*. California: Academic Press.
- Choo, C. W. et al. (2000). *Web Work: Information seeking and knowledge work on the world wide web*. Massachusetts: Kluwer Academic Publications.
- Chowdhury, G. G. (2011). *Information users and usability in the digital age*. New York: Neal-Schuman Publishers, Inc.
- Dalston, T. , & Columbus, M.P. (Eds.). (2008). *Virtual reference on a budget : Case studies*. Ohio: Linworth Pub.
- Ford, C. (2008). *Crash course in reference*. Westport, Conn.: Libraries Unlimited.
- Hillard, J. M. (2000). *Where to find what: A handbook to reference service*, (4th ed.). Lanham, Md.: Scarecrow Press.
- Kern, M. K. (2009). *Virtual reference best practices : Tailoring services to your library*. Chicago: American Library Association.
- Lange, A. et al. (1999). *Information Seeking in the Online Age: Principles and practice*. Michigan: K.G. Saur.
- Liu, L. G. (2001). (Ed.). *The role and impact of the Internet on library and information services*. Westport, Conn.: Greenwood Press.
- Mabry, C.H. (Ed.). (2003). *Cooperative reference : Social interaction in the workplace*. Binghamton, NY: Haworth Information Press.
- Radford, M.L., & Lankes, R.D. (Eds.). (2010). *Reference renaissance: Current and future trends*. New York: Neal-Schuman Publishers.

LIS-C 105: FOUNDATION OF COMPUTER APPLICATIONS

Objective: *Knowledge of information technology and computer application being fundamental to establish the foundation for the whole course, this paper is intended to familiarized and equip the students with at least the foundational level right at the beginning of the course by introducing them in the following aspects: (a) Introduction to Information Technology and Computer Applications, and (b) Operational Knowledge of general purpose operating system and application software.*

Unit I:

Computer Applications: introduction, development, and generations; Information Technology: introduction and scope; development; Computer generations Computer Components: Hardware and Software, Input and Output Devices; Storage devices; Number system: Binary number system, Binary codes, ASCII and Unicode; data types

Unit II:

Operating System: concept, types and functions: DOS, LINUX, and Windows File formats: types, nature and characteristics Office Packages: Word Processor, Spreadsheet, Presentation Tools, Ms-Access Practical: Operating System, Word Processor, Spreadsheet, Presentation Tools, Ms-Access

CORE READINGS

1. Arora, Ashok & Bansal, Shefali (2000). Computer Fundamentals. New Delhi: Excel Books.
2. Damien, Jose (2011). Introduction to Computers and Application Software. Jones & Bartlett Learning
3. Patnaik, Srikanta. (2001). First Textbook on Information technology, New Delhi, Dhanpat Rai
4. Pillai, Vinita & Jain, Satish (2007). Basic of OS, Unix Shell Programming. New Delhi: BPB Publication.
5. Rowley, J E. (1993). Computer for Librarians, London, Clive Bingley
6. Sinha, Pradeep Kumar and Sinha, Priti (2009). Foundation of Computing. New Delhi: BPB Publication.
7. Sybex. (2007). Linux Complete. New Delhi: BPB Publications.

ADDITIONAL READINGS

1. Reynolds , George. (2011). Ethics in Information Technology. 4th edition. Cengage Learning India Pvt Ltd, New Delhi.
2. ITL Education Solutions Limited (2011). Introduction to Computer Science, 2nd edition. Pearson Education India
3. Shelly, Gary B.and Misty E. Vermaat (2011). Discovering Computers and Microsoft Office 2010: A Fundamental Combined Approach. Cengage Learning

4. Ludwig, Sarah (2011). Starting from Scratch: Building a Teen Library Program (Libraries Unlimited Professional Guides for Young Adult Librarians Series). ABC-CLIO

LIS-O 201: LIBRARY SYSTEM ANALYSIS AND DESIGN

Objective: *The paper will enable students with or without prior training on computer systems or programming skills to develop and manage information systems in libraries and similar information environment using the following essentials: (1) Information systems concepts, (2) Requisite Skills, (3) System Methodologies, (4) System Development Tools, and (5) Perspectives on the successful development of systems.*

Unit I:

Information Systems Definitions; Types of Systems: Transaction Processing Systems, Management Information Systems, and Decision Support Systems; System Development Life Cycle; Systems Development Process: Traditional Waterfall, Prototyping, Computer-Aided Software Engineering (CASE), Joint Application Design (JAD), Rapid Application Development (RAD), Agile Methodologies and eXtreme Programming.

Unit II:

Systems Acquisition; Outsourcing; Sources of Software; Off-the-Shelf Software Selection Criteria; Request for Proposal (RFP) and Annual Maintenance Cost (AMC); Initiating and Planning: Process, Elements, Deliverables and Outcomes; Feasibility Assessment: Economic Feasibility, Technical Feasibility and Other Feasibility Concerns; Baseline Project Plan.

Unit III:

Requirements Determination: Traditional, Contemporary and Radical Methods; Requirement Structuring: Data Flow Diagram, Use Case, Structured English, Decision Tables and Decision Tress; Basic Database Design Process; Forms and Reports: Design, Formats, and Usability Assessment; Interfaces and Dialogues: Interaction Methods and Devices, Designing Interfaces, Designing Dialogues and Graphical Interface Design Issues.

Unit IV:

System Implementation: Coding, Testing, Installation, System Documentation, User Training and Support; System Maintenance: Types, Cost and Managing Maintenance; System Analyst: Role, Responsibilities and Required Skills; Security and Ethics.

CORE READINGS:

1. Avison, D. E. and Guy Fitzgerald (2006). Information Systems Development: Methodologies, Techniques & Tools (4th Ed.). McGraw-Hill

2. Hoffer, Jeffrey A., Joey F. George, and Joe Valacich (2013). *Modern Systems Analysis and Design* (7th Ed.). Pearson Education, Limited
3. Kochtanek, Thomas R. and Joseph R. Matthews (2002). *Library Information Systems: From Library Automation to Distributed Information Access Solutions*. Libraries Unlimited
4. Kock, Ned, (2006). *Systems Analysis & Design Fundamentals: A Business Process Redesign Approach*. SAGE
5. Wang, Shouhong and Hai Wang (2012). *Information Systems Analysis and Design*. Universal-Publishers
6. Webber, Desiree and Andrew Peters (2010). *Integrated Library Systems: Planning, Selecting, and Implementing*. ABC-CLIO

ADDITIONAL READINGS:

1. Chiang, Roger, Keng Siau, and Bill C. Hardgrave (2009). *Systems Analysis and Design: Techniques, Methodologies, Approaches, and Architectures* (Volume 15 of *Advances in Management Information Systems Series*). M.E. Sharpe
2. Davis, William S. and David C. Yen (2010). *The Information System Consultant's Handbook: Systems Analysis and Design*. CRC Press
3. Dennis, Alan, Barbara Haley Wixom, and Roberta M. Roth (2008). *Systems Analysis and Design* (4th Ed.). John Wiley & Sons
4. Eberhart, George M. (2006). *The whole library handbook* (4th Ed.), Volume 4, American Library Association
5. Joachim Baumeister (2004), *Agile Development of Diagnostic Knowledge Systems*. IOS Press
6. Kirikova, Marite (2002). *Information Systems Development: Advances in Methodologies, Components, and Management*. Springer
7. Pasquarelli, Maria Luiza R. (1992). *Integrated Library System: Two Case Studies: Latin America and India*. Concept Publishing Company
8. Vasilecas, Olegas (2005). *Information Systems Development: Advances in Theory, Practice, and Education*. Springer
9. Wilson, Katie, (2006). *Computers in Libraries: An Introduction for Library Technicians*. Routledge

LIS-C 202 KNOWLEDGE ORGANISATION-II (Theory)

Objective : To understand the structure and formation of Subjects and to understand the principles and practices of subject analysis and representation.

(a) Classification

Unit I

Notational plane: qualities, types; Canons and Mnemonics; Phase relation.

Unit II

Devices: Subject, Chronological, Geographical, Super imposition, Classic; Common isolates; Call number and collection numbers; automated library classification.

(b) Cataloguing

Unit III

Shared cataloguing: principles and methods; Union Catalogue; OCLC; OPACS; ISBN, ISSN; Resource Description and Access (RDA).

Unit IV

Bibliographic formats: concept, need and purpose; Types: CCF, MARC 21, UNIMARC; Citation: concept, need and purpose; Online citation tools; Authority files.

Core Readings:

1. Bowman, J.H. (2003). *Essential cataloguing*. London: Facet.
2. Broughton, Vanda. (2004). *Essential classification*. London: Facet Publishing.
3. Chan Lois Mai (1994). *Cataloguing and classification: an introduction*. New York: McGraw Hill.
4. Krishan Kumar (2000). *Theory of cataloguing*. New Delhi: Vikas Publication.
5. Krishan Kumar (2000). *Theory of classification*. New Delhi: Vikas Publication.
6. Needham, C.D. (1974). *Organising knowledge in libraries*. London: Andre Deutsch.
7. Ranganathan, S.R. (1989). *Elements of library classification*. (3rd.ed.). Bangalore: Sarada Ranganathan Endowment.
8. Ranganathan, S.R. (1989). *Prolegomena to library classification*. (3rd. Ed.). Bangalore: Sarada Ranganathan Endowment.

Additional Readings:

1. Carter, R.C. ed. (2001). *Managing cataloguing and the organisation of information: philosophies and challenges at the onset of the 21st century*. New York: Haworth Press.
2. Cole, Jim and Jones, Wayne ed. (2002). *E-serials cataloguing*. New York: Haworth Press.
3. Dhiman, A.K. & Yashoda Rani. (2005). *Learn library classification*. New Delhi: Ess Ess.
4. Kao, Mary L. (2001). *Cataloguing and classification for library technicians* (2nd Ed.). New York: Haworth Press.
5. Kao, Mary L. (2003). *Cataloguing and classification for library personnel*. Mumbai: Jaico.
6. Kumar, P.S.G. (2003). *Knowledge organisation, information processing and retrieval theory*. Delhi: B.R. Publishing.
7. Rowley, Jennifer and Farrow, John (2000). *Organising knowledge: an introduction to knowledge managing access to information*. London: Gower Publications.
8. Singh, Sonal. (1998). *Universe of knowledge: Structure and development*. Jaipur: Raj Publishing.
9. Sood, S.P. (1998). *Universe of knowledge and universe of subjects*. Jaipur: G.Star Printers.
10. Taylor, A.G. (2007). *Introduction to cataloguing and classification* (10th edition). New Delhi: Atlantic.

LIS – C 203: KNOWLEDGE ORGANISATION-II (Practice)

Objective: *To develop skills of subject analysis and ability to understand different methods of providing subject access.*

(a) Classification

Classification of documents by Dewey Decimal Classification and Colon classification in the following graded steps:

Unit I

Classification of documents having “common sub divisions and other auxiliaries”

Unit II

Classification of documents having “complex subjects”

Classification of documents having “complexities of mixed nature”

(a) Cataloguing

Practical cataloguing of books according to Anglo-American Cataloguing Rules - 1988 edition with amendments 1999, 2002. Assigning subject heading using Sears List of Subject Heading in the following graded steps:

Unit III

Continuous resources (serials); Analysis

Unit IV

Non-book materials (cartographic materials, thesis, audio-visual materials, etc.) and e-resources.

Additional Readings:

1. Andrew, P.G. (2003). *Cataloguing sheet maps: the basis*. London: Haworth Press.
2. Cole, Jim and Jones, Wayne ed. (2002). *E-serials cataloguing*. New York: Haworth Press.
3. Comaromi, J.P., Warren, M.J. & Dewey, Melvil. (1982). *Manual on the use of the Dewey decimal classification*. Forest Press.
4. Dhiman, Anil Kumar (2004). *Cataloguing of non book materials*. New Delhi: Ess Ess.
5. Dhyani, Pushpa. (2006). *Classifying with Dewey decimal classification*. New Delhi: Ess Ess.
6. Kaula, P.N. (1985). *A treatise on colon classification*. New Delhi: Sterling Publishers.
7. Khan, M.T.M. (2005). *Dewey decimal classification*. New Delhi: Shree Publishers.
8. Mary, Mortimer. (2007). *Learn Dewey decimal classification* (Ed. 22). Friendswood, US: Total Recall Publications.
9. Roe, Sandra K. (2002). *The audio-visual cataloguing current*. New York: Haworth Press.

10. Satija, M.P. (1995). *Manual for practical colon classification*. (Rev. ed. 3). New Delhi: Sterling Publishers.
11. Satija, M.P. (2004). *Exercises in the 22nd ed. Of Dewey decimal classification*. New Delhi: Ess Ess.
12. Singh, S.N. & Prasad, H.N. (1985). *Cataloguing manual AACR-II*. Delhi: B.R. Publishing.

LIS-C 204 : LIBRARY SOFTWARE (Theory & Practice)

Objective: Is to train the students on Open Source Library Management Software and Institutional Repository Software

(Theory)

Unit I

Open Source Software (OSS): Overview, Philosophy and Characteristics; Overview of Commercial Software, Free Software and Freeware; Standards: National Information Standards Organisation (NISO) and The Digital Library Federation (DLF); Metadata: Dublin Core, MARC, Resource Description and Access (RDA); Open Archives Initiative (OAI-PMH); Licensing Policy: GNU, Open Source Licenses and Free Software.

Unit II

Open Source Operating System (e.g., Linux) Hosting: Client, Server; Library Management Software: Proprietary and OSS; Introduction to proprietary software: **SOUL**, Library Management Software: **Koha**, Repository software: **DSpace**

(Practice)

Unit III

Practical's on Open Source Library Management Software (e.g., Koha): Introduction, Features, Architecture, Standards, Installation, Customization, and Use

Unit IV

Practical's on Open Source Repository Software (e.g., DSpace): Introduction, Features, Architecture, Modules, Installation, Customisation and Use

CORE READINGS

1. "Koha LiveCD." Mizstik Projects, n.d. <http://mizstik.com/projects/koha-livedcd/>.
2. "Koha selected as finalist for the 2003 Trophees du Libre award," May 5, 2003. <http://linuxpr.com/releases/5839.html>.
3. Breeding, Marshall. (2010) "LibLime Acquisition by PTFS Marks a New Era for Koha." Library Journal, <http://www.libraryjournal.com/article/CA6714841.html>.
4. Chawner, Brenda. (2002). "Koha: an open source success story." Library Link November <http://mustafa.emeraldinsight.com/vl=12220074/cl=48/nw=1/rpsv/librarylink/technology/nov02.htm>.
5. Engard, Nicole, and Lori Ayre. (2010). "Archives for Koha Webinars now available." Open Source – Open Libraries, <http://opensource.califa.org/node/75>.

6. Engard, Nicole. "Zotero Integration — Koha – Open Source ILS – Integrated Library System." Koha Library Software Community, n.d. <http://koha-community.org/documentation/3-2-manual/?ch=x8295#AEN8354>.
7. Eyler, Pat. (2003). "*Koha: a gift to libraries from New Zealand.*" Linux Journal.
8. Fedora: The Flexible Extensible Digital Object and Repository Architecture <http://www.fedora.info/index.shtml>
9. Guillaume Hatt. (2010). "*New Era for Koha: PTFS Acquires LibLime.*" Library Journal, InfoTech.
10. Haydock, Ian. (2010). "*PTFS to acquire Liblime.*" Meeting on the ledge. <http://ianhaydock.wordpress.com/2010/01/14/ptfs-to-acquire-liblime/>.
11. Horton, Valerie(2010). "*Major Shake, Rattle and Roll in Koha Land.*" Collaborative Librarianship News. <http://collaborativelibrarianship.wordpress.com/2010/01/13/major-shake-rattle-and-roll-in-koha-land/>.
12. Oberg, Steve. (2003). "*Open Source Software: An Introduction from a Serialist's Perspective.*" Serials Review 29.
13. Open Source Initiative OSI—Welcome <http://www.opensource.org>
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15. Preservation Puzzle. Available at http://ils.unc.edu/Callee/oss_preservation.htm.
16. Ransom, Joann. (2010). "*Users vs developers : not in my universe!*" Library Matters, <http://library-matters.blogspot.com/2010/01/users-vs-developers-not-in-my-universe.html>.

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1. Breeding, Marshall. (2002) "*An Update on Open Source ILS.*" Information Today 19, no. 9 : 42.
2. Devika P.M. (2009). "*A Digital Library of Library and Information Science using DSpace*", <http://drtc.isibang.ac.in>.
3. Ksharma, A(2006). "*Koha on Windows – Open Source Software for Library Management: A Case Study of IISS.*" Journal of Library & Information Science 31, no. 2: 97 – 109.
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5. Madalli DP (2008). "*A Digital Library of Library and Information Science using DSpace*" <http://drtc.isibang.ac.in> .
6. Meitei LS, Devi P (2009). "*Open Source Initiative in Digital Preservation: The Need for an Open Source Digital Repository and Preservation System*", 7th International CALIBER-2009, Pondicherry University,
7. Sonker, Sharad Kumar, and Francis Jayakanth, (2003). "*Koha: an open source integrated library automation system.*" SRELS Journal of Information Management.

LIS-C 205- LIBRARY HOUSEKEEPING OPERATIONS

***Objective :** This paper prepares students for their future role as library professionals through theoretical and hands-on activities in the classroom and the NEHU Central Library*

Unit I- LIBRARY HOUSEKEEPING OPERATIONS (THEORY)

Overview of NEHU Central Library Operations: Acquisition; Technical; Circulation; Periodical; Reference; Documentation and Maintenance

Unit II –LIBRARY HOUSEKEEPING OPERATIONS (PRACTICE)

Job Diary –A Report on observation of the NEHU Central Library operations is to be submitted to the Department for evaluation by an external examiner. A viva voce on the observations and the report will also be conducted by the Department.

Study Tour Diary - A Report on operations of Libraries visited during the study tour is to be submitted to the Department for evaluation by an external examiner. A viva voce on observations and the report will also be conducted by the Department.

Core Readings

Beardwell, I., & Holden, L. (1996). *Human resource management: A contemporary perspective*. UK: Longman.

Bryson, J. (1999). *Effective library and information management*. Bombay: Jaico Publishing House.

Chandan, J.S. (1994). *Management theory and practice*. New Delhi: Vikas Publishing House.

Middleton, Michael. (2002). *Information Management: A consolidation of operations, analysis and strategy*. New South Wales: Centre for Information Studies. Retrieved from <http://bookos.org/book/1270519>.

Suggested Readings

Narayan, G.J. (1991). *Principles and practice of management*. New Delhi: Prentice Hall of India.

Scammell, Alison. (Ed.). (2001). *Handbook of information management* (8th ed.). London: Aslib-IMI. Retrieved from

Wijnhoven, Fons. (2009). *Information Management: An informing approach*. New York: Routledge.

LIS-C 301 INFORMATION RETRIEVAL

Objective: *To equip the students on various facets of Information Processing and Retrieval*

Unit I

Information Retrieval (IR): Concept, Nature; Content Analysis: Concept and Types; Mapping the Information Content

Unit II

Indexing languages; Index construction: Concepts, Theory: Rationalist theories of Indexing; Historicist, Hermeneutical Theories of indexing Pragmatic and Critical Theories of indexing, Methods, Vocabulary Control; Subject Indexing: Sear's List and LCSH, Thesaurus, Thesaurofacet, Classaurus; Pre-coordinate Indexing System, Chain indexing, PRECIS - Preserved Context Index System, POPSI – Postulate based Permuted Subject Indexing, SLIC – Selective Listing in Combination; Post-coordinate indexing system, Uniterm Indexing System, Title derived Indexing System, Automatic Indexing, COMPASS.

Unit III

Types of search: Boolean, Proximity, Fuzzy, Iterative Search Techniques; Structure for Dictionaries, Querying, Wildcard Queries, Interpretation, Full Text Search, Spelling Correction, Phonetic Correction, Search engines, Web Search Basics, Z39.50, Metadata in IR

Unit IV

Design and Evaluation of Information Retrieval System (IRS), IR Model: Probabilistic Retrieval Model, Language Models, XML Retrieval; Text classification, Naive Bayes Vector Space Classification, Clustering, Web Crawling, and Link Analysis. Emerging Trends in IR: Artificial Intelligence, Expert System, Text Summarization, Text Compression and Optical character recognition (OCR)

CORE READINGS

1. Baeza-Yates, R. A., and Ribeiro-Neto, B. (2010). *Modern Information Retrieval (2nd Ed.,)*. Massachusetts: Addison-Wesley.
2. Baldi, P. P. Frascioni, P. Smyth. (2003). *Modeling the Internet and the Web: Probabilistic Methods and Algorithms*. England: Wiley
3. Croft, J. and W.B. Lafferty. (2003). *Language Modeling for Information Retrieval*. Berlin: Springer.
4. Croft, W. B., Metzler, D., and Strohman, T. (2010). *Search Engines: Information Retrieval in Practice*. London, England: Pearson.
5. Cleveland, D.B and A.D. Cleveland (2001): *"Introduction to indexing and abstracting" (3rd Ed.,)*. University of Michigan: Englewood, libraries Unlimited, Inc.
6. Lancaster, F. W. (2003): *"Indexing and abstracting in theory and practise" (3rd Ed.,)*. London: Facet

7. Chowdhury . G.G. (2004): *"Introduction to modern information retrieval" (3rd Ed.,)*. London: Facet.
8. Kowalski. G, M.T. Maybury. (2005). *Information Storage and Retrieval Systems*. USA: Springer.
9. Manning, C. D., Raghavan, P., and Schütze, H. (2008). *Introduction to Information Retrieval*. Cambridge, England: Cambridge University Press.
10. Meadow.C.T. B.R. Boyce, D.H. Kraft, C.L. Barry, (2007) *Text Information Retrieval Systems*. England : Academic Press.
11. Salton, G. (1968). *Automatic Information Organization and Retrieval*. New York: McGraw-Hill.
12. Voorhees. E.M and D.K. Harman, (2005). *TREC: Experiment and Evaluation in Information Retrieval*. Gaithersburg: MIT Press.

ADDITIONAL READINGS

1. Frohmann, B. (1990). *Rules of Indexing: A Critique of Mentalism in Information Retrieval Theory*. Canada, Journal of Documentation. 46(2), 81-101.
2. Grossman, David. A and Ophir Frieder. (2004). *Information Retrieval: Algorithms and Heuristic (The Information Retrieval Series) (2 Ed.,)*. USA: Springer
3. Liur, Tie-Yan. (2011). *Learning to Rank for Information Retrieval*. USA: Springer.
4. Mihalce, Rada and Dragomir Radev. (2011). *Graph-Based Natural Language Processing and Information Retrieval*. USA: Cambridge University Press.

LIS-C 302: RESEARCH METHODOLOGY

Objective – *To help develop an understanding of the concepts and methods in research*

Unit I

Research- meaning, need and significance; Types of Research- descriptive, analytical, applied, fundamental, quantitative, qualitative, conceptual, empirical, interdisciplinary, multidisciplinary and collaborative; Identification of Research Problem- concept, need and process of selecting the problem; Variables; Hypothesis- meaning, testing of hypotheses and procedure for hypothesis testing; Designing a Research Proposal- components and procedure.

Unit II

Methods: Historical Method; Scientific Method, Experimental Method; Descriptive Method; Survey Method and Case Study. Data collection tools and techniques: Questionnaire; Schedule; Interview; Observation, etc.

Unit III

Data Analysis and Interpretation: Descriptive Statistics-Measures of Central Tendency; Mean, Mode, Median; Tabulation and Generalisation; Measures of dispersion, variance and covariance; Standard Deviation Graphical presentation of data. Parametric and Non-Parametric test ;Statistical Packages.

Unit IV

Informatics, Bibliometrics, Scientrometrics & Webometrics; Bibilometric Laws: Lotka's, Bradford's and Zipf's Law; Citation Analysis, Co-citation Coupling and Bibliographic Coupling; Bibliographical Database.

RECOMMENDED READINGS

1. Ablex. Busha, Charles H and Harter, Stephen. (1980). *Research Methods in Librarianship*. NY: Academic Press.
2. Borgman, Christine L., ed. (1990). *Scholarly Communication and Bibliometrics*. Newbury Park, CA: Sage Publications, Inc.
3. Kothari, C R (2008). *Research Methodology: Methods and Techniques*, New Delhi, New Age International (p) Limited
4. Krishan Kumar (1992). *Research Method in Library and Information Science*, Delhi, Har-Anand Publications.
5. Moore, Nick (2000). *How to do research: the complete guide to designing and managing research projects*, 3 ed. London: Facet
6. Powel, Ronald R. (1991). *Basics Research Methods for Librarians*. 3rd Ed. Norwood NJ:

7. Sharma Pandey, S. R. (1990). *Universe of Knowledge and Research Methodology*, Delhi, Kent Publications
8. Trochim, William (2002). *Research Methods Knowledge base 2nd ed.*, Cincinnati, Altemic Dog Publishing.
9. Vaughan, Liwen. (2001). *Statistical methods for Information professionals: A Practical painless approach to understanding, using and interpreting statistics*. N.J.: Information Today.

LIS-C 303 : COLLECTION DEVELOPMENT

Objectives: *The paper provides skills to students on collection development which is one of the basic and vital activities in all libraries.*

Unit I

Collection Development – Concept; Goals and Methods

Principles of Collection Development – Principles by Ranganathan; Drury; Dewey; Library of Congress and American Library Association

Collection Development Policies – Concepts and Types

Planning for Collection Development – Committees; Staffing; Budgeting; Implementation and Evaluation

Unit II

Selection Tools – Types: Bibliographies; Publishers' Catalogues and Book Reviews
Evaluation of Selection Tools

Stock Verification and Rectification

Preservation of Collection (Print and Non-Print)– Concepts; Goals and Methods

Core Readings

1. Alabaster, Carol. (2002). *Developing an Outstanding Core Collection: A Guide for Libraries*. Chicago: American Library Association.
2. Anderson, J. S. (Ed). (1996). *Guide for Written Collection Policy Statements: Collection Management and Development Guides, no. 7*. (2nd ed.). Chicago: American Library Association.
3. Bonk, W. J., & Magrill, R.M. (1979). *Building Library Collections* (5th ed.). Metuchen, NJ: The Scarecrow Press, Inc.
4. Cassell, M. K., & Greene, G.W. (1991). *Collection Development in the Small Library: Small Libraries Publications, no. 17*. Chicago: American Library Association.
5. Curley, A., & Broderick, D. (1985). *Building Library Collections* (6th ed.). Metuchen, NJ: The Scarecrow Press, Inc.
6. Edelman, H. (1991). *Selection Methodology in Academic Libraries: Library Resources & Technical Services 23 (Winter 1979): 34*. In Osburn, C. B., & Atkinson, R. (Eds.), *Collection Management: A New Treatise, vol. 1*. Greenwich, CT: JAI Press, Inc.
7. Evans, G. E. (1995). *Developing Library and Information Center Collections*, (3rd ed.): Library Science Text Series. Englewood, CO: Libraries Unlimited, Inc.
8. Gabriel, M. R. (1995). *Collection Development and Collection Evaluation: A Sourcebook*. Metuchen, NJ: The Scarecrow Press, Inc.
9. Gardner, R. K. (1981). *Library Collections: Their Origin, Selection and Development*. . Quoted in Gorman, G.E. and B.R. New York: McGraw-Hill Book Company.

10. Gorman, G.E., & Miller, R.H. (1997). *Collection Management for the 21st Century: A Handbook for Librarians*. The Greenwood Library Management Collection. Westport, CT: Greenwood Press.
11. Howes. (1989). *Collection Development for Libraries: Topics in Library and Information Studies*. London: Bowker-Saur.
12. Katz, W. A. (1980). *Collection Development: The Selection of Materials for Libraries*. New York: Holt, Rinehart and Winston.
13. Perkins, D. L. (Ed.). (1979). *Guidelines for Collection Development*. Chicago: American Library Association.
14. Wortman, W. A. (1989). *Collection Management: Background and Principles*. Chicago: American Library Association.

Additional Readings

1. Kovacs, B. (1990). *The Decision-Making Process for Library Collections: Case Studies in Four Types of Libraries*. In Wasserman, P (Ed.), *Contributions in Librarianship and Information Science* no. 65. New York: Greenwood Press.
2. Magrill, R.M., & Corbin, J. (1989). *Acquisitions Management and Collection Development in Libraries* (2nd ed.). Chicago: American Library Association.
3. Mount, E. (1995). *Special Libraries and Information Centers: An Introductory Text* (3rd ed.). Washington, DC: Special Libraries Association.
4. Osburn, C. B., & Atkinson, R. (Eds.), (1991). *Collection Management: A New Treatise Vols. 1-2*. Greenwich, CT: JAI Press, Inc.
5. Sellen, B.C., & Curley, A. (Eds.). (1992). *The Collection Building Reader*. New York: Neal-Schuman Publishers, Inc.
6. Systems and Procedures Exchange Center, Kit 151. (1989). *Qualitative Collection Analysis: The Conspectus Methodology*. Washington, DC: Association of Research Libraries.
7. Systems and Procedures Exchange Center, Kit 207. (1995). *Organization of Collection Development*. Washington, DC: Association of Research Libraries.

LIS-O 304: DATABASE MANAGEMENT SYSTEM

Objective: *The extensive use of database system in the management of information resources, digital or physical, and the indispensability of such knowledge for information professionals to cope with future developments calls for an extensive understanding of the database management systems. Keeping in mind the library and information professionals whose requirement to handle database technology are binding to a great extent, this paper is intended to develop an comprehensive understanding of the nature, technological environments, models, and applications of database management system.*

Unit I:

Introduction, Characteristics and Advantages; Database Concepts: Data Models, Schemas and Instances; Database Architectures: Three Schema Architecture, Centralized and Client/Server; Data Independence; Database: Languages and Interfaces, Database System Environment; Classification of Database Management Systems; Phases of Database Design

Unit II:

Entity-Relationship (ER) Model: Entity Types, Entity Sets, Attributes and Keys; Relationships in ER Model: Relationship Types, Relationship Sets, Roles and Constraints; Naming Conventions and Design Issues; Enhanced Entity-Relationship (EER) Model: Subclasses, Superclasses and Inheritance; Constraints, Specialization and Generalization Hierarchies in EER

Unit III:

Data Abstraction, Knowledge Representation and Ontology Concepts; Relational Data Model: Concepts, Constraints and Schemas; Update Operations, Transactions and Constraint Violations; Relational Database Standard; Functional Dependencies; Normalization for Relational Databases; Relational Database Design

Unit IV:

Object-Oriented Databases Concepts: Object Identity, Object Structure and Type Constructors;

Encapsulation of Operations, Methods and Persistence; Types Class Hierarchies and Inheritance; Object Database Standards, Languages and Design; Object Relational and Extended Databases System; Emerging Database Technologies and Applications

CORE READINGS:

1. Elmasri, Ramez and Navathe, Shamkant B. (2011). Fundamentals of Database Systems (6th Edition). Addison-Wesley

2. Elmasri, Ramez, Fundamentals of Database Systems (5 Ed.). Pearson Education India, 2008
3. Gillenson, Mark L. (2011). Fundamentals of Database Management Systems (2nd Edition). Wiley
4. Gupta, G. K., Database Management System. Tata McGraw-Hill Education, 2011
5. Hellerstein, Joseph M., Michael Stonebraker, and James Hamilton, Architecture of a Database System. Now Publishers Inc, 2007
6. Hoffer, Jeffry A., Modern Database Management Systems (9 Ed.), Pearson Education India, 2009
7. Ramkrishnan, Raghu and Gelurke, Johannes (2003). Database Management Systems, McGraw-Hills: New York

ADDITIONAL READINGS:

1. Hentzen, Whil,(2007) MySQL Client-Server Applications with Visual FoxPro (Hentzenwerke Series). Hentzenwerke.
2. Solosky, Stephen C.(2002), Microsoft Access: Practice and Exercises (Rev. Ed.). Kendall Hunt Publishing Company.
3. Welling, Luke and Laura Thomson,(2003), Php and Mysql Web Development (2nd Ed.).Sams Publishing.
4. Adamski, Joseph J. and Kathy T. Finnegan, (2010) New Perspectives MS Access 2010. Cengage Learning.

LIS-O 305: INFORMATION COMMUNICATION TECHNOLOGY

Objective: *Information communication technology gradually occupying the core of library and information services is undeniably augmented by the day owing to the intensive technological development. The scope such implications are rather vast and extensive but this paper will lay the foundation for keeping abreast with the present and future development of the application of information communication technology in library and information science. The content of this paper are fundamental requirements to built such foundation.*

Unit I:

Introduction to Communication Systems and Telecommunications; Data Communications: Components, Representation and Data Flow; Networks: Criteria, Physical Structures and Topologies; Network Categories: LAN, WAN, MAN and Internetwork; Protocols and Standards; Network Models: Layered Task Concept, Open System Interconnect (OSI) Model and TCP/IP

Unit II:

Data to Signal Conversion: Line coding, Block coding and Scrambling; Data Transmission Modes: Parallel and Serial; Multiplexing: Frequency Division Multiplexing (FDM) and Time Division Multiplexing (TDM); Spread Spectrum: Frequency Hopping Spread Spectrum (FHSS) and Direct Sequence Spread Spectrum (DSSS); Transmission Media: Wired and Wireless

Unit III:

Switching: Circuit-Switched, Datagram, and Virtual Circuit Network; IEEE Standards on Local Area Network; Wired Local Area Network: Standard, Bridged and Switched Ethernet; Wireless Local Area Network: Bluetooth Architecture and Layers; Connecting Devices: Passive/Active Hubs, Repeaters, Bridges, Switches (layer two & three), Routers, and Gateway; File Transfer Protocol (FTP) and Remote Logging

Unit IV:

Connectivity: PSTN, DSL and Lease line; Email: Architecture, User Agent, SMTP, POP, IMAP and Web Mail; WWW: Client, Server, URL and Cookies; Web Documents: Static, Dynamic and Active; HTTP: Transaction, Persistent/Non-persistent Connection and Proxy Server; Streaming Audio/Video using Web Server, Metafile and Media Server; Real-Time Interactive Audio/Video; VoIP (Voice over Internet Protocol)

CORE READINGS:

1. Bradley, Phil, (2004). World Wide Web: How to design and Construct Web Pages (2nd Rev. Ed.). Psychology Press.
2. Forouzan, A. Behrouz, (2007). Data Communications & Networking (4th Special Indian Edition). Tata McGraw-Hill Education.
3. Geier, James T. (2005). Wireless Networks First-Step. Cisco Press.
4. Gralla, Preston, (1998). How the Internet Works (4th Ed.). Que Publishing
5. Peterson, Larry L. and Bruce S. Davie (2011). Computer Networks: A Systems Approach (5th Edition). Elsevier
6. Saffady, William (1999). Introduction to Automation for Librarians (4th Ed.). American Library Assn.
7. Shelly, Gary B., Albert H. Napier, and Ollie N. Rivers (2009). Discovering the Internet: Complete Concepts and Techniques (3rd Ed.). Cengage Learning.
8. Tanenbaum, Andrew S. (2002). Computer Networks (4th Edition). Pearson Education India.

ADDITIONAL READINGS:

1. Bradley, Phil (2012). How to Use Web 2.0 in Your Library (2nd Ed.). Facet Publishing.
2. Casey, Michael E. and Laura C. Savastinuk (2007). Library Two Point Zero (2nd Ed.). Information Today, Inc.
3. Courtney, Nancy (2007). Library 2.0 and beyond: innovative technologies and tomorrow's user. Libraries Unlimited.
4. Farkas, Meredith G. (2007). Social Software in Libraries: Building Collaboration, Communication, and Community Online. Information Today, Inc.
5. King, Irwin and R. Baeza-Yates,(2009). Weaving Services and People on the World Wide Web. Springer.
6. Korhonen, Juha (2003). Introduction to 3G Mobile Communications(2nd Ed.). Artech House.
7. Kroski, Ellyssa (2008). Web 2.0 for librarians and information professionals. Neal-Schuman Publishers.
8. Moussavi, Massoud (2011). Data Communication and Networking: A Practical Approach. Cengage Learning.
9. Papadimitriou, Georgios I., Andreas S. Pomportsis, P. Nicopolitidis, and Mohammed S. Obaidat (2003). Wireless Networks. John Wiley & Sons.
10. Thomas, Charles F. (2003). Libraries: the Internet, and Scholarship: Tools and Trends Converging. CRC Press.
11. White, Curt M. (2012). Data Communications and Computer Networks: A Business User's Approach (7th Edition). Cengage Learning.

LIS-C 401: MANAGEMENT OF LIBRARY AND INFORMATION SYSTEMS

Objective – *This paper aims at orienting the students with the basic concepts, principles and techniques of management with special reference to management of libraries and information centres*

Unit I

Management Concept, Functions and Principles; Schools of Management Thought: Classical, Scientific, Behavioural, Decision Theory, Contingency Approach, Systems Approach.

Unit II

Planning: Concept, Need and Levels; Management by Objectives (MBO); Decision Making. Total Quality Management (TQM); Change Management.

Unit III

Human Resource Management: Manpower Planning; Job Analysis, Job Description and Job Evaluation; Recruitment Procedures; Performance Appraisal; Leadership; Communication Process; Motivation; Organizational Manual; Annual Report.

Unit IV

Budgeting- Concept, Principles and Types; Resource Mobilisation for Libraries and Information Centres; Marketing of Information Products and Services. SWOT Analysis; Project Management.

RECOMMENDED READINGS

1. Beardwell, Ian & Holden, Len. (1996). *Human resource management: A contemporary perspective*. U.K: Longman.
2. Bryson, Jo. (1996). *Effective library and information management*. Bombay: Jaico Publishing House.
3. Bryson, Jo. (2011). *Managing information services: A sustainable approach*. England: Ashgate Publishing, Ltd.
4. Cartin, Thomas. J. (1998). *Principles and practices of organisation*. New Delhi: Prentice Hall of India.
5. Cascio, Wayne. (2012). *Managing human resources* (9th edition). Retrieved from www.amazon.com

6. Chabhra, T. N. et al. (2000). *Management and organisation*. New Delhi: Vanity Book International.
7. Chandan, J. S. (1994). *Management theory and practice*. New Delhi: Vikas publishing house.
8. Chopra, H. S. (1996). *Information marketing*. New Delhi: Rawat Publications.
9. Daft, Richard. L., & Marcic, Dorothy. (2012). *Understanding management* (8th edition).
10. Ducker, Peter. F. (2002). *Management challenges for the 21st century*. Oxford: Butterworth Heinemann.
11. Fine, Lawrence. (2011). *SWOT analysis*. Kindle Publishing.
12. Ghoshal, Sumantra. (2000). *Managing change*. New Delhi: Viking.
13. Jain, Abhinandan. K., Jambhekar, Ashok., Rao, T. P. Rama., & Rao, S. Shreenivas. (2010). *Marketing information products and services: A primer for librarians and information professionals*.
14. Kaagan, Stephen. S. (1999). *Leadership games*. New Delhi: Response Books.
15. Kotler, Philip. (2003). *Marketing management* (11th edition). New Delhi: Pearsons.
16. Mauch, Peter. D. (2010). *Quality management: Theory and application*. Narayana, G. J. (1991). *Library and information management*. New Delhi: Prentice Hall of India.
17. Paton, Robert. A. (2000). *Change management*. New York: Response.
18. Porter, Jim. (2012). *How to perform your own SWOT analysis*. Smashword Inc.
19. Prasad, L. M. (1989). *Principles and practice of management*. New Delhi: Sultan Chand.
20. Rowley, J. E. (2009). *Information marketing* (2nd edition).
21. Rowley, Jennifer. (2002). *Information marketing*. Aldershot: Ashgate Publishing Limited.
22. Sharma, S. (1999). *Management in new age*. New Delhi: New Age International.
23. Snell, Scott. A., & Bohlander, George. W. (2012). *Managing human resources*
24. St. Clair, Guy. (1997). *Total quality management in information services*. London: Bowker-Saur.
25. Stoner, James. A. F. et al. (1996). *Management* (6th edition). New Delhi: Prentice Hall of India.
26. Weilrich, Heinz & Koontz, Harold. (1994). *Management: A global prespective* (10th edition). New York: Mc Graw Hill Inc.

LIS-C 402: DIGITAL LIBRARY

Objective: *This paper will articulate an understanding of the conceptual and pragmatic basis of digital libraries in the framework of traditional library activities and services particularly of the following nature: (a) Determination of digital collection, creation and conversion of both print and digitally born resources, (b) Establishing procedural workflow without compromising to legal and ethical concerns including copyrights, preservation and accessibility, (c) Application of metadata schemes, evaluation and selection of equipments and software essential for the organization and control of digital objects in various formats.*

Unit I:

Definitions and Concepts: Digital Libraries and Institutional Repositories; Benefits and Limitations; Planning: Strategies and Implementation; Building: Acquisition, Management and Dissemination. Basic Concepts of Hybrid Libraries, Library Portals and Repositories; Institutional Repository: Planning, Content Submission and Acquisition.

Unit II:

Social Relevance: Human Development, Scholarly Archives, Preservation of Traditional Culture and Music. Legal Issues: Intellectual Property Rights, Copyrights in Digital Environments and Exceptions for Libraries; Legal Procedures: License Acquisition, Secondary License and Users Education. Digitization: Process, Purpose Localization, Selection Criteria and Prioritization.

Unit III:

Digital Formats: Textual and Non-textual; Character Encoding: Issues, Schemes and Standard; Mark-ups: Procedural, Presentational and Descriptive; Electronic Image: Resolution, Pixel and Color Encoding; Image Compression: Lossless and Lossy Techniques; Portable Document Format: Object types, features, application software, embedded images and true PDF; Document Conversion: Word to PDF/HTML/XML and XML to HTML/PDF.

Unit IV:

Infrastructural Requirements: Equipment, Software, Manpower and Costs; Workflow: Process, Document Management, Scanning, OCR (Optical Character Recognition) and Editing; Digitization for Preservation; Metadata: Types, Standards and Harvesting; Digital Library Website and Content: Visibility, Accessibility and Searchability;

Greenstone Digital Library Software: Installation, User Interface, Collection Building, Creating, and Previewing.

CORE READINGS:

1. Arms, William Y. (2001). Digital Libraries (2nd Ed.), Digital Libraries and Electronic Publishing Series MIT Press.
2. Bradley, Phil (2012). How to Use Web 2.0 in Your Library (2nd Ed.). Facet Publishing.
3. Jones, Wayne, Judith R. Ahronheim, and Josephine Crawford (2002). Cataloging the Web: Metadata, AACR, and MARC 21. Lanham, Md. Scarecrow Press.
4. Lee, Stuart D. (2001). Digital Imaging: A Practical Handbook. Neal-Schuman (University of Michigan).
5. Lesk, Michael, (2005). Understanding Digital Libraries (2nd Ed., revised). Elsevier.
6. Witten, Ian H., David Bainbridge and David M. Nichol (2009). How to Build a Digital Library (2nd Ed. revised). Morgan Kaufmann.
7. Zhang, Allison B. and Don Gourley (2008) Creating Digital Collections: A Practical Guide. Chandos Pub.
8. Cornell University Library. Moving Theory into Practice: Digital Imaging Tutorial. Available online at <http://www.library.cornell.edu/preservation/tutorial/contents.html>
9. Information Management Resource Kit. "Digital Libraries, Repositories and Documents." Available online at http://www.imarkgroup.org/moduledescription_en.asp?id=111
10. Library Technology Services, Harvard University Information Technology. "Digital Projects Guide". Available online at <http://hul.harvard.edu/ois/digproj/projguide.html>.
11. Washington State Library. Digital Library Best Practices. Available online at <http://digitalwa.statelib.wa.gov/newsite/best.htm>.
12. Sun Microsystems. The Digital Library Toolkit. 3rd edition. Available at http://www.ncsi.iisc.ernet.in/raja/is214/is214-2005-01-04/digital_library_toolkit-ed3.pdf

ADDITIONAL READINGS:

1. Borgman, Christine L. (2000). From Gutenberg to the Global Information Infrastructure. The MIT Press.
2. Cohen, S. & Williams, R. (1999). Non-Designer's Scan & Print Book (1st edition). Peachpit Press.
3. Kresh, Diane (2007). The Whole Digital Library Handbook. American Library Association.
4. Murray, J.D. & van Ryper W. (1996). Encyclopedia of Graphics File Formats (2nd Edition). O'Reilly & Associates, Inc.
5. Ranganathan, S. R. (1962). Elements of Library Classification. Asia Publishing House, Bombay, 1962
6. Seadle, M. and Greifeneder, E. (1999). Defining a Digital Library, Library Hi-Tech, 2007, 25(2), 169-173
7. Taylor, A.G. (1999). The Organization of Information. Library and Information Science Text Series

LIS-C403: E- LEARNING AND CONTENT MANAGEMENT SYSTEM (Theory and Practice)

***Objective:** Is to train the students on Learning Management and Content Management System Using, Open Source Software.*

(Theory)

Unit I

Open Source Software for Content Management System (CMS): MediaWiki, Joomla, Drupal, Zope; Wiki Hosting Services, Wiki Technologies in Libraries for Designing Subject Based Encyclopedias'; Subject directory/portal

Unit II

Open Source Software for Learning Management System (LMS): Moodle, ATutor, Claroline, Brihaspati (The Virtual Classroom). Courseware Management system: College.

(Practice)

Unit III

Practicals on CMS (e.g., Joomla / Drupal)

Installation and Customization:

- Basic Requirements
- Manual Installation
- Configuration Settings
- Publishing Content Using

Unit VI:

Practicals on LMS (e.g., Moodle / ATutor)

Installation and Customization

- Basic Requirements
- Manual Installation
- Configuration Settings.

CORE READINGS

1. Boiko, Bob. (2005). *Content Management Bible (2nd Ed.,)*. USA: Wiley Publishing, Inc.
2. Buchner, Alex. (2011). *Moodle 2 Administration*. UK: Packt Publishing, Ltd.
3. Burge, Stephe. (2011). *Joomla ! Explained : Your Step-by-step*. USA: Pearson Education, Inc.
4. Dvorak, Radana. (2011). *Moodle for Dummies*. USA: Wiley Publishing, Inc.
5. Goldstein. (2001). *CMS Made Simple Development Cookbook*. UK: Pack Publishing, Ltd.
6. Hauschildt, Sofia. (2010). *CMS Made Simple 1.6*. UK: Packt Publishing, Ltd.
7. Hogbin, Emma Jane. (2011). *Drupal User's Guide: Building and Administering a Successful Drupal-Powered Website*. USA: Person Education, Inc.
8. Hollowell, Jason. (2011). *Moodle as a Curriculum and Information Management System*. UK: Packt Publishing, Ltd.
9. Model, Kurt. (2012). *Drupal 7 Development by example Beginner's Guide*. UK: Packt Publishing, Ltd.
10. Sanserm, Sineenuch Khrulmuang. (2012). *Student and Instructor Perception of using ATutor as the Learning Content Management System for Learning at Distance in Thailand*. USA. ProQuest
11. Shreves, Ric . (2013). *Joomla ! Bible (2nd Ed.,)*. USA: John Wiley & Sons, Inc.
12. Tiggeler, Eric. (2012). *Joomla ! 2.5. Beginner's Guide*. UK: Pack Publishing, Ltd.

ADDITIONAL READINGS

1. Drupal Tutorial - How to use Drupal CMS www.siteground.com/tutorials/drupal-tutorial/
2. <http://atutor.ca/view/16/16092/1.html>
3. <http://docs.joomla.org/>
4. <http://extensions.joomla.org> – Find lots of very cool extensions to further enhance your Joomla! websites.
5. <http://forum.joomla.org/> Sign up for the forums, search, and ask questions, even helping others if you are able!
6. <http://help.atutor.ca/index/index.php>
7. <http://help.joomla.org> – Find more documentation and training information.
8. <http://www.joomla.org> – Find a way to give something back to the community!
9. http://www.siteground.com/tutorials/atutor/atutor_installation.htm
10. <http://www.wiki.org/wiki.cgi?WhatIsWiki>
11. Moodle Tutorial - How to Install & Use Moodle www.siteground.com/tutorials/moodle/
12. Moodle Tutorials : moodle-tutorials.blogspot.com/
13. Moodle Tutorials: Overview and Index <http://www.fcpe.adelphi.edu/moodle/> - United States
14. SimpleTest Tutorial (Drupal 6) | www.drupal.org drupal.org/simpletest-tutorial
15. Tutorials | drupal.org drupal.org/documentation/customization/tutorials

LIS-C 404: INFORMATION SOURCES AND SERVICES (PRACTICE)

Objectives: *This is the Practical component of paper LIS-C 104 which involves practical exercises on INFORMATION SOURCES AND SERVICES.*

Unit I- EVALUATION AND COMPILATION CRITERIA FOR INFORMATION SOURCES AND SERVICES

Evaluation Criteria for Reference Sources: Print and Electronic, Compilation Techniques: Bibliographies; Contents Lists; Indexes; Abstracts and Press Clippings

Unit II – EVALUATION AND COMPILATION OF INFORMATION SOURCES AND SERVICES

Evaluation Report on Reference Sources: Print and Electronic, Compilation Report on Bibliographies; Contents Lists; Indexes; Abstracts and Press Clippings

** Students are required to evaluate select print and electronic reference sources and to submit evaluation reports to the Department. They are also required to compile bibliographies, contents lists, indexes, abstracts and press clippings and submit the compiled work to the Department for evaluation.*

CORE READINGS

1. Bauers, M. (2001). *Using the Internet as a Reference Tool: A how-to-do-it manual for libraries*. London: Library association Publishing.
2. Cooke, A. (2001). *A guide to Finding Quality Information on the Internet: Selection and evaluation strategies*. London: Library Association Publishing.
3. David, R (et al) (Eds.). (2003). *Implimenting digital reference services: Setting standard making it real*. London: Library Association Publishing.
4. Foskett, D.J. (1967). *Information Services in Libraries* (2nd ed.). Hamden: Anchor Books.
5. Grogan, D. J. (1979). *Practical Reference Work*. London: Clive Bingley.
6. Harrison, K.C. (1966). *Facts at your Fingertips: Everyman's guide to reference books* (2nd ed.). London: Kenneth Mason.
7. Kats, W. (1974). *Introduction to Reference Work Vols.I-II*. New York: McGraw Hill Book Company.
8. Kemp, D.A. (1979). *Current Awareness Services*. London: Clive Bingley.
9. Kumar, K. (1991). *Reference Services* (4th ed.). New Delhi: Vikas Publishing House.
10. Lipow, A.G. (2003). *The Virtual Reference Librarian's Handbook*. London: Library Solutions Press.

11. Marshall, J., Fisher, B., Moulton, L., & Piccoli, R. (May 1996). *Competencies for special librarians of the 21st century*. Special Libraries Association. (Retrieved from <http://www.sla.org/professional/competency.html>)
12. Owen, T. (1996). *Success at the Enquiry Desk*. London: Library Association Publishing.
13. Singh, S. (2001). *Handbook on International Sources on Reference and Information*. New Delhi: CREST Publishing.

ADDITIONAL READINGS

1. Angoff, A. (Ed.). (1973). *Public Relations for libraries*, London: Greenwood.
2. Balay, R. (ed) (1992). *Guide to Reference Books Covering Materials from 1985-1990*. Chicago: American Library Association.
3. Haythornthwaite, J. (1995). *"Skills for today and tomorrow" in new roles, new skills, new people*. Hatfield: University of Hertfordshire Press.
4. Jago, A. (1995). *"Approaching 2000: new challenges for the information professional" in New roles, new skills, new people*. Hatfield: University of Hertfordshire Press.
5. Kaul, H.K. (1998). Library and Information professionals in the 21st Century. *University News*, 36(19) 1998, pp.11-13.

LIS-C 405: DISSERTATION

Theoretical and methodological preparation for this paper begins in the 3rd Semester with Course No. LIS-C 302: Research Methodology. Allocation of Supervisors for this paper is done during the beginning of the 3rd semester and the students are given necessary guidance and thus the dissertation work practically begins from the 3rd semester itself.

Students are required to give seminars on their chosen topics for continuous/internal assessment.

The students will require to write a dissertation on the following themes:

1. Literature review of any current topic in library and information science
2. Conducting case studies and surveys of libraries located in the north east of India
3. Designing a database using a library software package
4. Studies related to information retrieval on internet
5. Any other studies related to library and information science