

Syllabus
for
MLIS

Programme Outcomes

The course is designed to equip students with essential professional skills for the advancement of modern and traditional libraries. It provides a comprehensive understanding of Library and Information Science principles, with an emphasis on organizing and retrieving information through advanced cataloging and metadata standards, as well as user-centered information services. The course covers key management and leadership concepts, focusing on the application of modern information technologies with emphasis on understanding different digital library software, resource discovery tools and digital preservation aspects. Additionally, the course develops robust research capabilities and guides students in navigating the ethical and legal intricacies of scholarly communication and information management. The course also promotes information literacy, advocates for equitable information access, and addresses social and cultural responsibilities, while encouraging ongoing professional development. The program prepares students for managing the information across academic, public, special and digital libraries. Further, the students are also trained for specialized leadership roles in academic publishing and information policy, ensuring broad career prospects in and beyond the Library and Information Science field.

MLIS

1st

Semester

Semester 1st

Course Code	Course Title	Paper Category	L	T	P	Credits
LIS18101CR	Foundations of Library and Information Science	Core	03	01	0	04
LIS18102CR	Knowledge Organization & Discovery <i>(Theory and Practice)</i>	Core	03	01	0	04
LIS18103CR	Library Operations	Core	03	01	0	04
LIS18104DCE	Public Library System	Discipline Centric Elective	03	01	0	04
LIS18105DCE	School library	Discipline Centric Elective	03	01	0	04
LIS18106DCE	Oriental librarianship	Discipline Centric Elective	03	01	0	04
LIS18107DCE	Health information System: Introduction to history and policies	Discipline Centric Elective	03	01	0	04
LIS18108DCE	Information Technology – Theory	Discipline Centric Elective	03	01	0	04
LIS18001GE	Open-Source Software	Generic Elective	01	01	0	02
LIS18001OE	Library and Information Services	Open Elective	01	01	0	02

LIS18101CR: FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcomes

- The course will help in indoctrinating effective professional skills among students for successfully professionalizing modern libraries using exciting professional skills, professional association when they are going to exercise their acquired knowledge at practice level.
- Course acquaint students with the library as a social institution for knowledge generation, creation and dissemination
- Develop an understanding of the philosophical and social foundations of Library and information centers

Unit-I

- 1.1 Library: Basic concept with Historical foundation of libraries.
- 1.2 Types of libraries and their distinguishing features.
- 1.3 Information society: Genesis, Characteristics and implications.
- 1.4 Library: Role in contemporary Society.

Unit- II

- 2.1 Five Laws of Library Science: Foundation and Implications.
- 2.2 Library development in India with particular reference to post Independence period.
- 2.3 Library legislation – Need and purpose. Library legislation in India – problems and prospects.
- 2.4 Intellectual Property Right: Basic Concept and issues with special emphasis on copy right Act in Indian context

Unit-III

- 3.1 Profession: Concept and attributes.

- 3.2 Librarianship: Professional ethics
- 3.3 Professional Associations
 - 3.3.1 National Associations in India: ILA, IASLIC, IATLIS and SIS
 - 3.3.2 International and other important Associations: IFLA, CILIP (UK), ALA (USA)
- 3.4 Library and information Science education and research in India

Unit-IV

- 4.1 Role of International promoters for development of Libraries:
 - 4.1.1 United Nations Educational, Scientific and Cultural Organization (UNESCO)
 - 4.1.2 Online Computer Library Centre (OCLC)
- 4.2 Role of National level promoters
 - 4.2.1 Raja Ram Mohan Roy Library Foundation (RRRLF)
 - 4.2.2 University Grants Commission (UGC, New Delhi)
 - 4.2.3 Information and Library Network (INFLIBNET) and overview of other developing networks in India
- 4.3 Extension Services: Concept and methods.

Suggested Readings

- Aggarwal, U. K Ed. (1999). *Twentieth Century Library Legislation in India*. Udaipur: Shiva publication.
- Atkinson, Frank. (1974). *Librarianship: An introduction to the profession*. London: Bingley.
- Chowdhury, G. G., Burton, P. F., McMenemy, D., &Poulter, A. (2008). *Librarianship: An introduction*. London: Facet Publishing.
- Gates, Jean Key. (1968). *Introduction to Librarianship*. New York: McGraw Hill.
- Heilprin, L. B., & American Society for Information Science. (1985). *Toward foundations of information science*. White Plains, N.Y: Published for the American Society for Information Science by Knowledge Industry Publications.
- Isaac, K.J. (1987). *Libraries and librarianship: A basic introduction*. Madras:
- Jain, M K (Ed) 50 years: *Library and information services in India*. Delhi :Shirpa Publications.
- Khanna, J.K. (1987). *Library and society*. Kurukshetra: Research Publisher.

- Kumar, P. S. G. (2003). *Foundations of library and information science*. Delhi: B.R. Pub. Corp. Kumar, P.S.G.(2003). *Foundations of Library and Information Science*. Paper I of UGC Model Curriculum. New Delhi: Manohar.
- Kumar, PSG and Vashishth (Ed). *Library and information science in India*. Delhi : Sterling Publishers.
- Mangla, P. B., &Prashar, R. G (Ed).(2004). *Library and Information Science Education in south Asia*.Ludhina: Medallain
- Martin, William J. (1995). *The Global Information Society*. (2nd.rev.ed.) London: ASLIB
- Penna, C. V. (1982).UNESCO. In *Encyclopedia of Library and InformationScience*.(Vol. 3,p-3 New York: Marcel Dekkar
- Prasad, K. N. Intellectual property Rights (1998). In Neelameghan, A. & Prasad, K. N (Eds.), *Information systems, Networks and Services in India*, Bangalore: Ranganathan centre for Information Studies
- Ranganathan, S. R. (1931) *Five Laws of Library Science*. Madras: Madras Library Association. Ranganathan, S. R. (1953.) *Library Legislation: Handbook to Madras Library Act*. Madras: Madras Library Association.
- Rout, R.K. Ed. (1999) *Library legislation in India*. New Delhi: Reliance.
- Rubin, R. E. (2016). *Foundations of library and information science*. London: Facet Publishing.
- Sen B.K. (2002). Five laws of Library Science? IASLIC Bulletin, 47(3), p.121-140.
- Sharma, P. S. K. (1992). *Library and society*. 2 Ed. Delhi: ESS ESS.
- Shera, Jesse H. (1972.) *The foundation of Education for librarianship*. New York: Becker and Hayer.
- Spink, A., & Singh, D. (2012). *Library and information science trends and research: Asia Oceania*. Bingley: Emerald.Ustun, Ayse. (2002). The changing role and responsibilities of information professionals *Library progress (International)*, 22(2), 101-108
- Velaga V. & Madhusudhan, M. (2006). *Public Library legislation in the new millennium: New Model Public Library Acts for the Union*. Bookwell.
- Venkatappiah, V. (1990).*Indian Library Legislation (2Vol.s)*. Delhi: Daya Publications.
- Verma, S. R. (2005). *Foundations of library and information science*. New Delhi: Shree Publishers & Distributors.
- Wall, Raymond.A (1993) *Copy right made easier*. London, Aslib

Websites (Illustrative) :

American Library Association. Available at <http://www.ALA.org>

Information Library Network. Available at <http://www.inflibnet.ac.in>

LIS18102CR: KNOWLEDGE ORGANISATION & DISCOVERY

(Theory and Practice)

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
2	0	2	4

Course Outcomes:

- The student will be able to demonstrate an understanding of the organization and maintenance of library collection in retrieval effective manner.
- The student will be able to use standard classification tools in the effective organization of the collection holdings.
- The student will be able to understand the formation and expansion of universe of knowledge with a need to understand its organization
- They will be acquainted with major schemes of classification and this course shall develop skills in subject analysis and synthesis.

Unit I

- 1.1 Classification: Terminology, Purpose and Species.
- 1.2 Universe of Knowledge: Attributes and Representation in leading schemes of Classification.
- 1.3 Five Fundamental Categories, Rounds and Levels

Unit II

- 2.1 Modes of Formation of Subjects
- 2.2 Notation: Purpose, qualities and capacity increasing devices
- 2.3 Principles of helpful sequence (An Overview)

Unit III

- 3.1 Introduction to DDC with special reference to Standard Subdivisions (Table 1), Areas (Table 2), Subdivisions of Individual Literature (Table 3).
- 3.2 Description of Subdivisions of Individual Languages (Table 4), Racial, Ethnic and National Groups (Table 5), Languages (Table 6) and Persons (Table 7)
- 3.3 Synthesis of number for simple and compound subjects using DDC

Unit-IV

- 4.1. Multiple syntheses using DDC
- 4.2. Derivation of Book number using Cutter Three- Figure Author Table

Suggested Readings

- Gopinath, M.A.(1987). *Colon Classification*.(7thed).Bangalore: Sarada Ranganathan Endowment.
- Hunter, Eric. (2002).Classification made Easy. England: Ashgate pub.
- Kemp, D.A. (1976). *Nature of knowledge: An introduction to libraries*. London: Clive Bingley.
- Khanna, J.K. & Vashisht, K.K. (1985). *Knowledge, evolution, structure and research methodology*. New Delhi: Ess Ess.
- Krishan Kumar. (1980). *Theory of classification*. (2nd ed). New Delhi: Vikas.
- Meadow. J. (2001). *Understanding information*. K. G. Saur, Munchen.
- Prasad, Anirudh., (2005).*Colon Classification*. New Delhi: Shree Pub.
- Ranganathan, S.R. (1989). *Descriptive account of colon classification*. Bangalore: Sarada Ranganathan. Endowment for Library Science.
- Ranganathan, S. R. (1964). *Colon Classification (6th ed.)*.Bombay: Asia.
- Ranganathan, S. R. (1965). *Prolegomena to library Classification*. (2nd Ed) . London: LA.
- Rita, Marcella., & Arthur, Maltby (2000). *Future of Classification*. England: Gower. (NA)
- Rowley, J.F. (1987). *Organising Knowledge: An Introduction to information retrieval*. Aldershot: Gower. (NA)
- Satiya, M. P. & Aggarwal, S.P. (1990). *Book number: Some Indian methods*. New Delhi: Concept. (NA)
- Sayers, W.C.B. (1975). *Manual of classification for librarians*. London: Andre Duetsch.
- Saeed, Hamid.,& Chaudhry, Abdus. Sattar. (2002). Using Dewey decimal classification scheme (DDC) for building taxonomies for knowledge organization. *Journal of Documentation*, 58 (5), 575-583. Available at

<http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=Published/EmeraldFullTextArticle/Articles/2780580505.html>

Shabahat Hussain (1993). *Library Classification: Facets and Analyses*. Delhi: B.R. pub.

Sharma, Panday. S.K. (1990). *Universe of knowledge and Research Methodology*. Delhi: Kent pub

Srivastava, A P. (1993). *Theory of knowledge classification in libraries*. New Delhi: Sage.

Websites (Illustrative):

OCLC. (2012). *DeweyDecimalClassification*. OCLC. Available at

<http://www.oclc.org/dewey/>

OCLC. (2012) *WebDewey*. Available at

<http://www.oclc.org/dewey/resources/tutorial/>

LIS18103CR-LIBRARY OPERATIONS

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcome

- The course will provide an in-depth knowledge about various library operations for better understanding the technicalities involved in successful collection development and management in modern libraries.
- Students shall get acquainted with essential routines and operations performed in various types of libraries for providing effective services

Unit I

- 1.1 Different Operations: Mechanism and components.
- 1.2 Collection Development: Purpose and Policy.
- 1.3 Selection: Principles.
- 1.4 Selection tools: print and non-Print Materials.
- 1.5 Acquisition: Mechanism of Procurement, functions.
- 1.6 Problems in Acquisition.

Unit II

- 2.1 Technical Processing: Need, Role and procedure.
- 2.2 Accessioning.
- 2.3 Classification.
- 2.4 Cataloguing.
- 2.5 Labeling.
- 2.6 Shelving and Display.
- 2.7 Maintenance.

Unit III

- 3.1 Serials: Concept and types.
- 3.2 Serials: Selection and Procurement
 - 3.2.1 Planning.
 - 3.2.2 Selection.
 - 3.2.3 Ordering.
 - 3.2.4 Problems and Issues.
- 3.3 Traditional Serial Control Systems.
- 3.4 Automated Systems.

Unit IV

- 4.1 Circulation: Concept, Need and Functions.
- 4.2 Charging and Discharging Systems: Traditional and Modern Systems.
- 4.3 Care and Preservation.
 - 4.3.1 Common Sources of danger to Documents: Physical, Chemical and Biological factors and Preventive Measures.
 - 4.3.2 Digital Preservation: Concept, importance and measures.
- 4.4 Stock verification: Methods and Tools
- 4.5 Stock Evaluation and weeding.

Suggested Readings:

- Boss, R. W., & American Library Association. (2003). *RFID technology for libraries*. Chicago, Ill: American Library Association.
- Chapman, L (2004). *Managing Acquisitions in Library and information Services (Rev ed)*. London: Facet Pub.
- Chen, D. C. (1995). *Serials management: A practical guide*. Chicago: American Library Association.
- Deegan, M., & Tanner, S. (2006). *Digital preservation*. London: Facet.
- Dhiman, A. K., & Rani, Y. (2004). *Library management: A manual for effective management*. New Delhi: EssEss.

- Elguindi, A. (2013). *Electronic resource management. Practical perspectives in a new technical services model*. Stanton Harcourt: Chandos Publishing Ltd.
- Elguindi, A. C., & Schmidt, K. (2012). *Electronic resource management: Practical perspectives in a new technical services model*. Oxford: Chandos.
- Evans, G. E., Intner, S. S., & Weihs, J. R. (2011). *Introduction to technical services*. Santa Barbara, California: Libraries Unlimited.
- Fenner, A. (2004). *Selecting materials for library collections*. Binghamton, NY: Haworth Information Press.
- Fowler, D. C. (2004). *E-serials collection management: Transitions, trends, and technicalities*. New York: Haworth Information Press.
- Grieder, Theodore. (1978). *Acquisitions: where, what and how: a guide to orientation and procedure for students in librarianship, librarians and academic faculty*. Westport Conn: Greenwood.
- Gupta, S. R. (1990). *Stock verification in libraries: Problems and solutions*. Delhi: Ken Publications.
- Hibner, H., & Kelly, M. (2010). *Making a collection count: A holistic approach to library collection management*. Oxford: Chandos Publishing.
- Johnson, Peggy. (2004). *Fundamentals of Collection Development and Management*, Chicago: American Library Association.
- Kao, M. L. (2001). *Introduction to technical services for library technicians*. New York: Haworth Information Press.
- Kao, M. L., & Kao, M. L. (2003). *Introduction to technical services for library personnel*. Mumbai: Jaico Pub. House.
- Kidd, T., Rees-Jones, L., & UK Serials Group (2000). *The serials management handbook: A practical guide to print and electronic serials management*. London: Library Association Pub.
- Kirk, R. A. (2013). *Balancing the books: Accounting for librarians*. Santa Barbara, California : Libraries Unlimited
- Kumar, Krishan. (1987). *Library Administration and Management*, Delhi: Vikas Pub.
- Lazinger, S. S., & Tibbo, H. R. (2001). *Digital preservation and metadata: History, theory, practice*. Englewood, Colo: Libraries Unlimited.

- Lazinger, Susan. S. (2001). *Digital Preservation and metadata*. Englewood: Greenwood.
- Lee, S. D. (2002). *Electronic collection development: A practical guide*. New York: Neal-Schuman Publishers.
- Lock, Reginald Northwood. (1973). *Library Administration (3rd ed)* London: Crosby Lockwood Staples.
- Magrill, Rose Mary (1989). *Acquisitions Management and Collection Development in Libraries* (2nd ed). Chicago: American Library Association.
- McIntosh, J. (2011). *Cataloging and indexing: Challenges and solutions*. Oakville, Ont: Apple Academic Press.
- Millard, Scott. (2004). *Introduction to Serials Work for Library Technicians*. U.S.A: Haworth Press.
- Mukherjee, A.K. (1974). *Book Selection, Principles, Practices and tools*. Calcutta: world Press.
- Palmer, M. (2009). *Making the most of RFID in libraries*. London: Facet.
- Pandian, M. P. (2010). *RFID for libraries: A practical guide*. Oxford: Chandos.
- Peck, P. (2006). *Crash course in children's services*. Westport, Conn: Libraries Unlimited.
- Ranganathan, S.R. (1989). *Library Administration (2nd Rev ed-)*. Bangalore: Sarada Ranganathan Endowment for Library Science
- Singh, R.S.P (1999) *Library Administration and management*. New Delhi: Ocean Books.
- Spiller, David. (1996). *Book Selection: Principles and Practice (5th ed)* London: Library Association.
- Tuttle, M., Swindler, L., & White, N. I. (1983). *Introduction to serials management*. Greenwich, Conn: JAI Press.
- Van, O. P., & Strong, S. (2007). *Children's books: A practical guide to selection*. New York: Neal-Schuman Publishers.
- Wilkinson, F. C., & Lewis, L. K. (2003). *The complete guide to acquisitions management*. Westport, Conn: Libraries Unlimited.

LIS18104DCE: PUBLIC LIBRARY SYSTEM

4 credits

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcome

Students will able to:

- Know the public library and its role in society.
- Understand the genesis and development of public libraries.
- Have knowledge of and can operate hassle free run public library system at different levels.
- Can offer range of public library specific services and activities.

Unit I

- 1.1 Public Library: Concept, Origin and Growth
- 1.2 Role of Library Associations and Organizations in Development of Public Library System at National: RRRLF, ILA & International Level: IFLA, UNESCO.
- 1.3 National Library Policy and Library Legislation
- 1.4 Public Library system in relation to mass education: Political, industrial, economic life, Cultural advancement and Youth Development

Unit II

- 2.1 Development Plans and Resource Mobilization: Private-Public Partnership.
- 2.2 Architecture Planning and Administration of Public Libraries
- 2.3 Collection Development and Management: Emerging Trends: E-Consortia, Free and Open Access Sources.
- 2.4 Public Library Norms, Standards and Guidelines
- 2.5 Role of Advocacy and Pressure Groups in Public Library Development.

Unit III

- 3.1 Library Services and Activities: From Reactive to Proactive: Conservative Services, Outreach services, Online Services etc.
- 3.2 Resource Sharing and Public Library Grid
- 3.3 Public Libraries and Internet Public Access Models
- 3.4 Public Library 2.0

Unit IV

- 4.1 Automation and ICT: Current application and future trends in public libraries
- 4.2 Open Source Software for Public Libraries: Features and Utilities
- 4.3 Designing a model Digital Public Library for
 - 4.3.1 Children,
 - 4.3.2 Young,
 - 4.3.3 Old and
 - 4.3.4 Physically Challenged
- 4.4 Case Study of Digital Services of Model Public Libraries

Suggested Readings

- Adams, H. R. (2005). *Privacy in the 21st century: Issues for public, school, and academic libraries*. Westport, Conn: Libraries Unlimited.
- Agarwal, U.K. (1994). *Public library Services in India*. New Delhi: Himanshu Pub.
- Bertot, J. C., Jaeger, P. T., & Mc Clure, C. R. (2011). *Public libraries and the Internet: Roles, perspectives, and implications*. Santa Barbara, Calif: Libraries Unlimited.
- Casey, M. E., & Savastinuk, L. C. (2007). *Library 2.0: A guide to participatory library service*. Medford, N.J: Information Today.
- Chowdhury, G., Poulter, A., & McMenemy, D. (2006). *Public Library 2.0: Towards a new mission for public libraries as a network of community knowledge*. Online Information Review, 30, 4, 454-460.
- Chowdhury, G., Poulter, A., & Mc Menemy, D. (2006). *Public Library 2.0: Towards a new mission for public libraries as a network of community knowledge*. Online Information Review, 30, 4, 454-460.

- Creating public paradise: Building public libraries in the 21st century* (2004). Leidschendam: Biblion Uitgeverij.
- Curran, K., Murray, M., & Christian, M. (2007). *Taking the information to the public through Library 2.0. Library Hi Tech*, 25, 2, 288-297.
- Elliott, Donald S., et al (2007). *Measuring your library's value: how to do a cost-benefit analysis for your public library*. Chicago :American Library Association
- Furlong, J. T. (2002). *The bottom line: Managing library finances*. Bradford, England: Emerald Group Pub.
- Garrod, P. (2003) *Which Way Now? The future of UK public libraries*, *Ariadne*, 35, Available at
<http://www.ariadne.ac.uk/issue35/public-libraries/>>
- Garrod, P. (2004) *Adaptive Technologies in Public Libraries*, Networked Services Policy Task Group. Issue Paper No. 1 Available at
<http://www.ukoln.ac.uk/public/nsptg/adaptive-technologies/>>
- Garrod, P. (2004) *The Changing Face of the Public Library*, *Ariadne*, 39, Available at
<<http://www.ariadne.ac.uk/issue39/public-libraries/>>
- Gosling, M., Harper, G., & McLean, M. (October 02, 2009). *Public library 2.0: Some Australian experiences. Electronic Library*, 27, 5, 846-855.
- Goulding, A. (2006). *Public libraries in the 21st century: Defining services and debating the future*. Aldershot, England: Ashgate Pub. Co.
- Goulding, A. (2006). *Public libraries in the 21st century: Defining services and debating the future*. Aldershot: Ashgate.
- Hamilton-Pennell, C., & Western Illinois University, Illinois Institute for Rural Affairs. (2008). *Public Libraries and Community Economic Development: Partnering for Success. Rural Research Report. Volume 18, Issue 10, Winter 2008*. Illinois Institute for Rural Affairs. Western Illinois University, 518 Stipes Hall, 1 University Circle, Macomb. Available at <http://www.iira.org>.
- Higgins, Susan E. (2007). *Youth Services and Public Libraries*. Oxford: Chandos Publishing
- Lou, J., Wang, S., & World Bank. (2008). *Public finance in China: Reform and growth for a harmonious society*. Washington, D.C: World Bank.
- Lowe, J. A., & American Library Association. (1928). *Public library administration*. Chicago: American library Association.

- McClure, C. R., & Jaeger, P. T. (2009). *Public libraries and internet service roles: Measuring and maximizing Internet services*. Chicago: American Library Association.
- McCook, Kathleen de la Peña. (2004). *Introduction to Public Librarianship*. New York: Neal-Schuman Publishers
- McMenemy, D. (2009). *The public library*. London: Facet.
- Palmour, V. E., Bellasai, M. C., & Anne Arundel County Public Library. (1980). *Five year plan for public library services: Needs, goals, and implementation*. Rockville, Md: King Research.
- Prentice, A. E. (2011). *Public libraries in the 21st century*. Santa Barbara, Calif: Libraries Unlimited.
- Public Agenda Foundation., Americans for Libraries Council., & Bill & Melinda Gates Foundation (2006). *Long overdue: A fresh look at public attitudes about libraries in the 21st century*. New York: Public Agenda.
- Rath, P. K. (1996). *Public library finance*. Delhi: Pratibha Prakashan.
- Simpson, M. S., & Duwel, L. I. (2007). *Bringing classes into the public library: A handbook for librarians*. Jefferson, N.C: McFarland & Co.
- Titangos, Hui-Lan H., & Mason, Gail L. (2012). *Learning Library 2.0: 23 Things @ SCPL*. *Library Management* 30 (1/2): pp: 44-56. Available at <http://www.emeraldinsight.com/Insight/ViewContentServlet?contentType=Article&Filename=Published/EmeraldFullTextArticle/Articles/0150300104.html>
- Usherwood, B., & Library Association. (1996). *Re-evaluating public library management*. London: Library Association.
- Vårheim, Andreas., & Steinmo, Sven (2012). *Do libraries matter? Public libraries and the creation of social capital*. *Journal of Documentation*. V 64(6): pp: 877-892. Available at <http://www.emeraldinsight.com/Insight/ViewContentServlet?contentType=Article&Filename=Published/EmeraldFullTextArticle/Articles/2780640604.html>
- Waller, Vivienne. (2012). *Legitimacy for large public libraries in the digital age* *Library Review* V57(5): pp: 372-385. Available at <http://www.emeraldinsight.com/Insight/ViewContentServlet?contentType=Article&Filename=Published/EmeraldFullTextArticle/Articles/0350570504.html>
- Woodrum, P. (1989). *Managing public libraries in the 21st century*. New York: Haworth Press.
- Yarrow, A., Clubb, B., & Draper, J.-L. (2008). *Public libraries, archives and museums: trends in collaboration and cooperation*. The Hague: International Federation of Library Associations and Institutions.

LIS18105 DCE-SCHOOL LIBRARY

(4 credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcomes

- This paper will inculcate knowledge of school library system among the students so that they will be able grasp the knowledge of subject particularly to the subject/area specialized library profession.
- This will provide an overview of principles and practices in school library systems
- Students will be able to understand the challenging roles of school libraries and media specialists.

Unit I

- 1.1 School Library System: Basic Concept.
- 1.2 Major objectives of School Libraries.
- 1.3 Components of School Libraries.
 - 1.3.1 Collection.
 - 1.3.2 Basic Infrastructure.
 - 1.3.3 Staff

Unit II

- 2.1 Role of School libraries in promoting and supporting Education.
- 2.2 Role of School Librarian.
- 2.3 Qualities of School Librarian.

Unit- III

- 3.1 Management of School Libraries.
- 3.2 Services provided by school library
- 3.3 Major Problems Faced by School Libraries.

Unit IV

- 4.1 Impact of ICT on School Libraries.
- 4.2 School Library Automation
- 4.3 Internet and school libraries with emphasis on important search engines for different age groups.

Suggested Readings

- American Library Association. (1961). *Remodeling the elementary school library: Manual for filmstrip*. Chicago: American Library Association.
- Andronik, C. M. (2003). *School library management*. Worthington, Ohio: Linworth Pub. Brophy, P. (2005). *The academic library*. London: Facet Pub.
- Budd, J. (2005). *The changing academic library: Operations, cultures, environments*. Chicago: Association of College and Research Libraries.
- Christian, A. R. (2013). *Academic library management: Universities, colleges and institutions*. Jaipur: Vista Publishers
- Cohen, L. B. (2007). *Library 2.0 initiatives in academic libraries*. Chicago: Association of College and Research Libraries.
- CBSE. *School Library Accessible at*.
<http://cbse.nic.in/LIBRARY-199.pdf>
- Dutchess County BOCES School Library System (N.Y.). (1986). *School library system notes*. Red Hook, N.Y: The System.
- Fontichiaro, K. (2009). *21st-century learning in school libraries*. Santa Barbara, Calif: Libraries Unlimited.
- G.L. Trehan, I.V. Malhan (1980). *School library management*. New Delhi : Sterling Publishers.
- International Federation of Library Association (2015). *IFLA School Library Guidelines*
<https://www.ifla.org/files/assets/school-libraries-resource-centers/publications/ifla-school-library-guidelines.pdf>
- Marquardt, L. (2010). *School Libraries*. München: De Gruyter Saur.
- McCain, M. M., & Merrill, M. (2001). *Dictionary for school library mediaspecialists: A practical and comprehensive guide*. Englewood, Colo: Libraries Unlimited.
- McGhee, M. W., & Jansen, B. A. (2010). *The principal's guide to a powerful library media program: A school library for the 21st century*. Santa Barbara, Calif: Linworth.

School Library Association. (1988). *Routines: Managing a small school library*. School Library Association.

Sullivan, M. L. (2015). *High impact school library spaces: Envisioning new school library concepts*.

Thanuskodi, S. (2013). *Challenges of academic library management in developing countries*. Hershey PA: Information Science Reference.

Verma, S. R. (2005). *Academic library system*. New Delhi: Shree Publishers & Distributors.

LIS18106DCE-ORIENTAL LIBRARIANSHIP

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcome

- The students will develop the proficiency to identify and handle the oriental collection.
- They will be able to recognize the appropriate methods for the organization, preservation and digitization of the said collection.
- Students will understand the problems and could offer solutions faced by oriental libraries at Global, national and regional level.

Unit I

- 1.1 Oriental Libraries: Concept, Growth and Development
- 1.2 Select Oriental Library at Global Level

Unit-II

- 2.1 Organization of oriental literature
- 2.2 Metadata standards for digitized manuscripts and other oriental literature.
 - 2.2.1 Dublin core
 - 2.2.2 Encoded Archival Description
 - 2.2.3 TEI P5 Manuscript Description for Cataloguing Digitized Manuscripts.

Unit-III

- 3.1 Historical perspective of Preservation and conservation
- 3.2 Rehabilitation of documents
- 3.2 Digitization: Basics & IFLA guidelines

Unit-IV

- 4.1 Preservation of manuscripts
- 4.2 Preservation program of manuscripts: assessment of initiatives in India
- 4.3 Preservation program: challenges and issues

Suggested Readings:

- Amjid, Ali. (2004). *Oriental Libraries of India and Their Collections*, New Delhi: Ess Ess Publications
- Amjid, Ali. (2005). *Oriental Manuscripts Worldwide*, New Delhi: Ess Ess Publications.
- Birgitta Ruth., & Warner, Robert Mark. (1966). *The modern manuscript library* : Scarecrow Press.(NA)
- Dana, John Cotton. (1907). *A brief outline of the history of libraries*, A.C. McClurg Harvard University
- Deegan, Marilyn. , & Tanner, Simon (2006). *Digital preservation*, Michigan :Facet pub. (NA)
- Fitzpatrick, John Clement. (1928). *Notes on the care, cataloguing, calendaring and arranging of manuscripts*, US : Govt. Print. Office., Library Branch Library of Congress.(NA)
- Gladney, Henry M. (2007). *Preserving digital information*, illustrated ed: Springer.
- Kent, Allen (2002). *Oriental Libraries. In Encyclopedia of library and information science, illustrated ed CRC Press, 2002*
- Marshall, D.N. (1983). *History of Libraries: Ancient and mediaeval Oxford & IBH Pub.*
- Rare books & Manuscripts Librarianship (1993). Association of College and Research Libraries. (NA)
- World survey of Islamic Manuscripts. (1994). Al-Furqan Islamic Heritage Foundation; London.
- Gilgit Manuscripts. (1941). *Srinagar; Oriental press;*
- Mughals in India: a bibliographic survey of manuscripts (1985) *London: Mansell Pub*
- Zobair, Al-Haj Mohammed. (1978). *Islamic Kutub Khane*(urdu) (P224-225) Karachi: H.M. Sayeed.

Websites (illustrative):

Asiatic society, Available at

www.asiaticsocietycal.com/

Cambridge University Library Available at

www.lib.cam.ac.uk/

Indira Gandhi National Centre for the Arts , Available at

www.ignca.nic.in/

KhudaBakhsh Oriental Public Library , Available at

www.kblibrary.bih.nic.in/

Rampur Raza Library , Available at

www.razalibrary.gov.in/

Royal Asiatic Society London, Available at

www.royalasiaticsociety.org/

The British Library - The world's knowledge, Available at

www.bl.uk

LIS18107DCE-HEALTH INFORMATION SYSTEM: INTRODUCTION TO HISTORY AND POLICIES

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcomes

- Students will be able to formulate some new ways and means in order to cater the information needs of the health professionals
- Students will be able to understand the working procedures and policies of Health Information Systems

Unit-I

- 1.1 Health and Healthcare Information: Introduction
- 1.2 Health Information Systems: Overview
- 1.3 History and Evolution of Health Care Information System

Unit-II

- 2.1 Health Informatics as a Discipline
- 2.2 Health Informatics as a Profession
- 2.3 Health Information System: Models

Unit III

- 3.1 Health Information Technology
- 3.2 Information Technology Adoption & Challenges
- 3.3 Quality of Health Information Systems

Unit IV

- 4.1 Health information systems in developing countries: benefits, problems, and prospects
- 4.2 Public health and Web 2.0
- 4.3 Knowledge, Attitude and Practice of Health Information System

Suggested Readings

- Anna D. Cleveland & Donald B. Cleveland. (2009). *Health Informatics for Medical Librarians*. New York: Neal-Schuman Publishers
- Kathryn J. Hannah & Marion J. Ball. (Series Editor). (2011). *Health Information Systems Architectures and Strategies*. London: Springer.
- Lyn Robinson. (2010). *Understanding Healthcare Information*. London: Facet Publishing.
- M Sandra Wood. (2008). *Introduction to health science librarianship*. London: Routledge, Taylor and Francis.
- Pacific Health Information Network. (n.d). *Health Information Systems (HIS)*. Available at: <http://phinnetwork.org/resources/health-information-systems-his/>
- Rajesh Kumar Sinha & Archana Sinha. (2015). *Knowledge, Attitude and Practice of Health Information System*. *Journal of Health Management*, 17(4) 425–437. DOI: 10.1177/0972063415606268
- World Health Organization. (2008). *Health Information Systems*. Available at: http://www.who.int/healthinfo/statistics/toolkit_hss/EN_PDF_Toolkit_HSS_InformationSystems.pdf

LIS18108DCE-INFORMATION TECHNOLOGY - THEORY

(4 credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcome

- The course is framed keeping in view the essence of building the theoretical IT foundation among the students in order to make them comfortable in understanding and using different operating systems, Database Management systems, Software packages etc. for implementing library automation in different setups.
- Students will be familiar with the basic concepts and components of Information technology, software tools and database management systems useful for information management

Unit I

- 1.1 Information Technology: Foundation & components.
- 1.2 Computer: Genesis, Components & Functions.
- 1.3 Computer: Development & Generations.
- 1.4 Peripheral Devices:
 - 1.4.1 Memory: Primary and Secondary.
 - 1.4.2 Storage Devices, Communication Devices, Multimedia Devices.

Unit II

- 2.1 Operating System: Genesis, Development and Functions.
- 2.2 MS DOS: Introduction, Structure and Commands.
- 2.3 Windows: Features.
- 2.4 Linux: Features and brief commands.
- 2.5 Windows NT: Components and Features.
- 2.6 SERVER: Functions & Client Server Architecture

Unit III

- 3.1 Programming: Fundamentals.
- 3.2 Algorithm and Flowcharts.

- 3.3 Programming Languages: Tools.
- 3.4 Generations of Programming Languages: An Overview

Unit IV

- 4.1 MS-Word, MS-Excel, MS-PowerPoint.
- 4.2 DBMS and RDBMS: concepts, structure, applications.
- 4.3 MS Access: Features, design and query formulation.
- 4.4 Bibliographical Database: ISIS family (CDS/ISIS and WINISIS.)

Suggested Readings:

- Aswal, R.S. (2003). *CDS/ISIS for windows: A Handbook for Librarians*. New Delhi: Ess Ess Pub.
- Clarke, A. (2005). *IT Skills for successful Stud* . New York: Palgrave Macmillan.
- Date, C.J.(2004). *An introduction to database systems*. Boston: Pearson Addison Wesley. Desai, B. C. (2003). *An introduction to database systems*. St. Paul: West Pub.
- Dixit, J.B. (2006). *Fundamentals of Computers and Programming in C*. Banglore: Laxmi Pub.
- English, S., & English, S. (2007). *Excel 2007*. Rochester, NY :Axzo Press.
- Fehily, C. (2005). *Windows XP*. Berkeley, Calif: Peachpit.
- Fehily, C. (2007). *Microsoft Windows Vista*. Berkeley, Calif: Peachpit. Gunter, S. K. (2007). *Microsoft Office 2007 simplified*. Hoboken, NJ: Wiley.
- Gunter, S. K. (2007). *Teach yourself visually Office 2007*. Indianapolis, IN: Wiley Pub., Inc.
- Hart-Davis, G. (2011). *Office 2010 made simple*. New York: Apress.
- Harvey, G. (2010). *Excel 2010 all-in-one for dummies*. Hoboken, NJ: Wiley Pub. Horowitz E. (1995). *Fundamentals of Programming Languages*. New Delhi: Galgotia
- Leon, A & Leon M. (1999). *Fundamentals of information technology*. Chennai: Leon Vikas Pub
- MacDonald, M. (2010). *Excel 2010*. Beijing: O'Reilly.
- Marmel, E. J. (2013). *Teach yourself visually Office 2013: The fast and easy way to learn*. Indianapolis, IN: John Wiley & Sons, Inc.
- Mathews, M. S .(2003) .*Windows Server 2003: A beginner's guide*. New York: McGraw-Hill/Osborne.
- Mathews, M. S., & Mathews C. (2007). *Microsoft Office Word 2007 Quicksteps*. New York: McGraw-Hill.
- Mathews, M.S., & Cronan, J. (2005). *Microsoft Office Word 2003*. New York: McGraw Hill.

- Matthews, C. B., Matthews, M. S., & Cronan, J. (2010). *Microsoft Office 2010 quicksteps*. New York: McGraw-Hill.
- Matthews, M. S. (2013). *Windows 8*. New York: McGraw-Hill.
- McFedries, P. (2009). *Teach yourself visually Windows 7*. Indianapolis, IN: Wiley Pub.
- McFedries, P. (2009). *Windows 7 simplified*. Indianapolis, IN: Wiley Pub.
- McFedries, P. (2012). *Teach yourself visually Windows 8*. Hoboken, N.J: Wiley.
- McFedries, P. (2012). *Windows 8 simplified*. Indianapolis, IN : John Wiley & Sons, Inc., [2012] ©2012
- Muir, N. (2007). *Teach yourself visually Excel 2007*. Hoboken, N.J: Wiley.
- Nair, R. (1998). *Basics of CDS/ISIS for DOS*. Delhi: D.K .Pub.
- Neelamejhan, A. (2004). *TUTOR+ A learning and teaching package in hypertext link commands in WINISIS*. Bangalore: Sarada Ranganathan Endowment.
- Pogue D. (2006). *Windows XP for starters*. Sebastopol, CA: Pogue. Pogue, D. (2010). *Windows 7*. Sebastopol, CA: O'Reilly Media.
- Pogue, D. (2013). *Windows 8. Beijing; Sebastopol, CA O'Reilly, [2013] Rathbone, A. (2004). Windows XP for dummies*. Hoboken, NJ: Wiley Pub.
- Rathbone, A. (2009). *Windows 7 for dummies*. Hoboken, N.J: Wiley.
- Rathbone, A. (2012). *Windows 8 for dummies*. Hoboken, N.J: John Wiley & Sons.
- Ray A. K, Acharya T. (2004). *Information Technology: Principles and applications*. New Delhi: Prentice Hall.
- Ritchie, C. (2003). *Operating Systems Incorporating Unix and Windows*. New Delhi: BPB Pub.
- Rob, P. (2007). *Database Systems: design, implementation, and management*. Boston, Mass: Thomson/Course Technology.
- Rutkosky, N., & Seguin, D. (2004). *Microsoft PowerPoint 2003*. St. Paul, MN: EMC /Paradigm.
- Rutkosky, N.,& Seguin, D. (2004). *Microsoft Access 2003*. St. Paul, MN: EMC/Paradigm.
- Rutkosky, N.,& Seguin, D. (2004). *Microsoft Excel 2003*. St. Paul, MN: EMC/Paradigm.
- Schwartz, S. A. (2013). *Microsoft office 2013*. Berkeley, Calif.: Peachpit Press.
- Schwarz, M. (2002). *Multitool Linux: Practical uses for open source software*. Boston: Addison-Wesley.
- Senn, J. A. (2004). *Information Technology: Principles, Practices, and opportunities (3rd ed)* .N.J: Pearson Prentice Hall.
- Shelly, G. B., Cashman, T. J., & Forsythe, S. G. (2001). *MS Windows XP: Introductory concepts and techniques*. Cambridge, Mass: Course Technology.
- Shoup, K. (2008). *Office 2007*. Indianapolis, Ind: Wiley.
- Shoup, K. (2010). *Teach yourself visually Office 2010*. Indianapolis, Ind: Wiley Pub., Inc.

Stephen, M. (2007). *Excel 2007*. London: Teach Yourself.

Tanenbaum, A .(2001). *Modern Operating Systems*. N.J: Prentice Hall.

Turban, E .(2005). *Introduction to information technology*. New York: John Willey.

Ulrich, L. A. (2003). *How to do everything with Microsoft Office 2003*. Newyork: McGraw Hill

Wang, W. (2007). *Office 2007 for dummies*. Indianapolis, Ind: Wiley.

Wang, W. (2010). *Office 2010 for dummies*. Hoboken, N.J: Wiley.

Weverka, P. (2007). *Office 2007 all-in-one desk reference for dummies*. Hoboken, NJ: Wiley Pub. Inc.

Websites (Illustrative):

UNESCO. (2007). Available at

<http://www.unesco.org/isis/files/winisis/windows/doc/english/WINISIS15rev.pdf>

LIS18001GE- OPEN SOURCE SOFTWARE

(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
02	0	0	02

Course Outcome

- The course is framed keeping in view the essence of building the theoretical foundation about Open-source software among the students in order to make them familiar about open-source software and its use in different systems as a viable alternative to commercial software.
- Students will be familiar with the basic concepts and components of Opensource software, allied tools and Opensource content and database management systems used in modern IT environment.

Unit 1 Open Source Software: Basics

- 1.1 Open Source: Concept and Development.
- 1.2 Open Source Software: Concept and Characteristics.
- 1.3 Open Source Software in different Setups: An overview
- 1.4 Open Source Software: Benefits and challenges

Unit 2 Open Source Environments

- 2.1 Open Source Operating Systems: Ubuntu, and FreeBSD etc.
- 2.2 Apache OpenOffice, LibreOffice and Neo Office
- 2.3 Open Source Content Management Systems: An Overview
- 2.4 Open Source Database tools: MySQL, PostgreSQL and SQLite.

Suggested Readings

FreeBSD(2015). FreeBSD. Available at

<https://www.freebsd.org/>

Joomla (2015). Joomla. Available at

<http://www.joomla.org/>

LibreOffice (2015). LibreOffice. Available at

<https://www.libreoffice.org/>

MySQL (2015). MySQL. Available at

<https://www.mysql.com/>

NeoOffice(2015). NeoOffice. Available at

<https://www.neooffice.org/neojava/en/index.php>

OpenCms(2015). OpenCms. Available at

<http://www.opencms.org/en/>

Ubuntu(2015). Ubuntu. Available at

<http://www.ubuntu.com/>

Open Source Initiative (2015). Open Source Initiative. Available at

<http://opensource.org/>

PostgreSQL(2015). PostgreSQL. Available at

<http://www.postgresql.org/>

SQLite(2015). SQLite. Available at

<https://www.sqlite.org/>

LIS18001OE-LIBRARY AND INFORMATION SERVICES

(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
2	0	0	2

Course Outcomes

Unit – I

- 1.1 Role of Libraries
- 1.2 Categories of Libraries: Salient Features

Unit – II

- 2.1 An overview of Library and Information services.
- 2.2 Reference services.
- 2.3 CAS, SDI – Concept and nature.

Suggested Readings

Kumar, P.S.G.(2003) Foundations of Library and Information Science. Paper I of UGC Model Curriculum. New Delhi: Manohar.

Jain, M K (Ed) 50 years: Library and information services in India. Delhi :Shirpa Publications.

Kumar, PSG and Vashishth (Ed). Library and information science in India. Delhi : Sterling Publishers.

Penna, C. V. (1982). UNESCO In Encyclopedia of Library and Information Science.(Vol. 3,p-3 New York: Marcel Dekkar

Miller, M. A. (January 01, 2006). Scholarly Communication. Change New Rochelle Then Washington Dc-, 38, 6, 6-6.

Morrison, H. (2009). Scholarly communication for librarians. Oxford: Chandos Pub.

Strauss, D. F. M. (2008). Scholarly communication. Communication.34(1).113-129.

Starratt, J. (201). Scholarly communication: Trends, economics and future. Philadelphia, Pa: Taylor & Francis.



2nd Semester

Semester II

2 nd Semester	Course Code	Course Title	Paper Category	L	T	P	Credits
	LIS18201CR	Library Management	Core	03	01	0	04
	LIS18202CR	Knowledge Representation and Discovery (Theory & Practice)	Core	03	01	0	04
	LIS18203CR	Information Sources	Core	03	01	0	04
	LIS18204CR	Digital Library Technology	Core	03	01	0	04
	LIS18205DCE	Disaster Management and Preparedness in Libraries	Discipline Centric Elective	03	01	0	04
	LIS18206DCE	University Library System	Discipline Centric Elective	03	01	0	04
	LIS18207DCE	Preservation and conservation Techniques	Discipline Centric Elective	03	01	0	04
	LIS18208DCE	Web Technologies and Techniques: Health Information Network Systems	Discipline Centric Elective	03	01	0	04
	LIS18002GE	Citation and Reference Management Software	Generic Elective	01	01	0	02
LIS18002OE	Information Literacy – Basics	Open Elective	01	01	0	02	

LIS18201CR-LIBRARY MANAGEMENT

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcome

- The course will help in inculcating effective managerial skills among stakeholders for successfully managing modern libraries using vibrant human resource management techniques, financial resource management skills. It will further develop better understanding of technicalities involved in knowledge and project management for state of art service delivery in modern library settings.
- Students will be able to use management techniques to achieve the organizational effectiveness and efficiencies in library and information centers
- This Course shall develop skills for handling effectively the library and information management routines, finances and human resource development

Unit I

- 1.1 Management: Concept and Functions.
- 1.2 Principles of Management.
- 1.3 Management: Schools of thought
 - 1.3.1 Classical School.
 - 1.3.2 Behavioral.
 - 1.3.3 Systems approach.
- 1.4 Application of management function and principles to Library and Information Centres.

Unit II

- 2.1 Human Resource Management: Basic concept and Importance in library management context
- 2.2 Job Analysis and Job Description: Basic concept and Methods
- 2.3 Recruitment process
 - 2.3.1 Selection: Methods employed

- 2.3.2 Induction and orientation: Techniques used
- 2.4 Motivation: Concept and theories
 - 2.4.1 Maslow's Theory of Motivation
 - 2.4.2 Herzberg's Theory of Motivation
- 2.5 Professional Training Development programmes: Concept, Importance and techniques

Unit III

- 3.1 Financial Management: Concept, Scope and Objectives
- 3.2 Library Budget and Budgetary Methods:
 - 3.2.1 Line Item or Incremental Budget
 - 3.2.2 Formula Budget
 - 3.2.3 Programme Budget
 - 3.2.4 Planning Programming Budgeting System (PPBS)
 - 3.2.5 Zero- Base Budgeting (ZBB)
 - 3.3 Cost Analysis: Concept and Methods
 - 3.3.1 Cost Benefit
 - 3.3.2 Cost Effectiveness

Unit IV

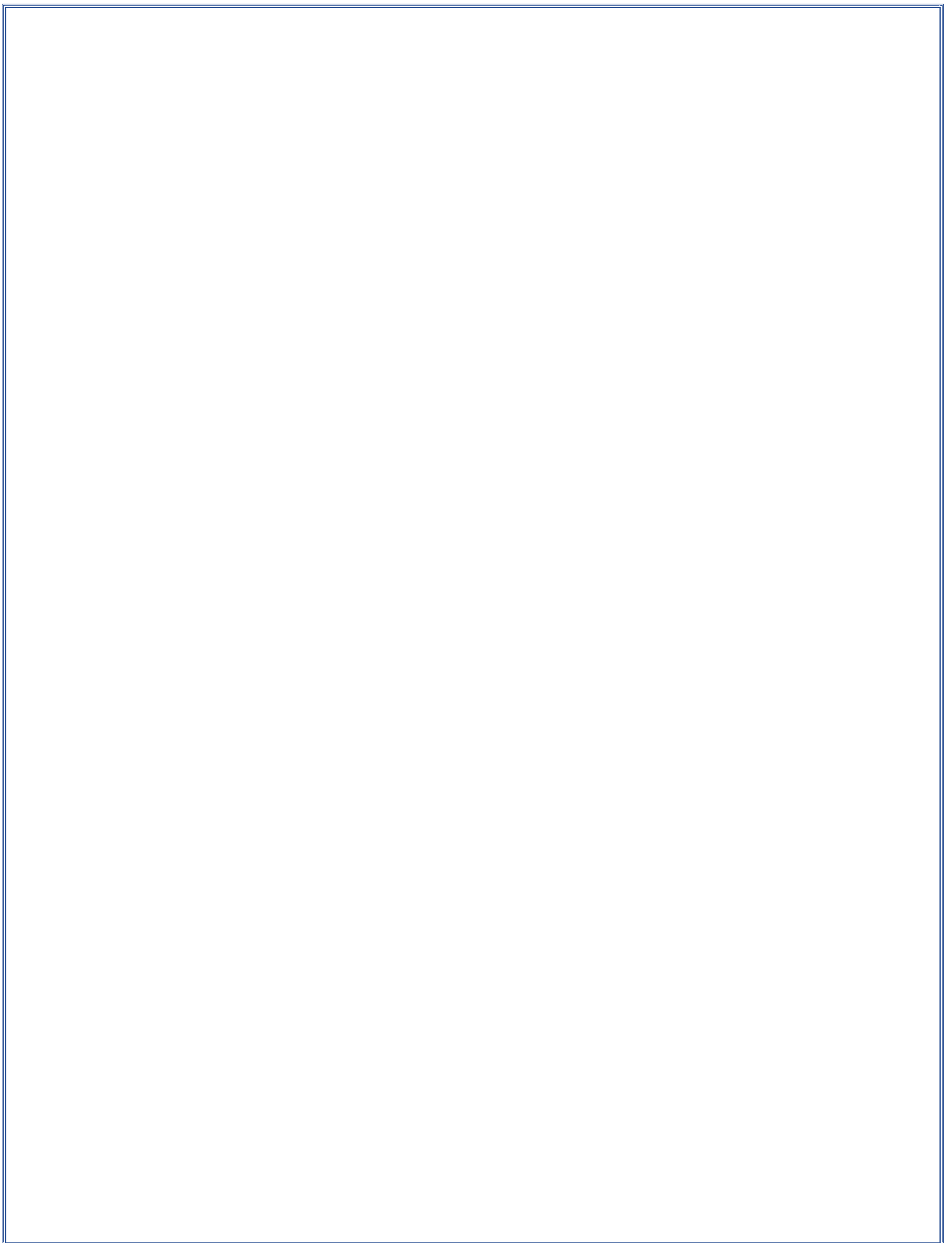
- 4.1 Service Management
 - 4.1.1 Nature, Significance and Characteristics of Services.
 - 4.1.2 Factors influencing the growth of services.
 - 4.1.3 Managing the Service quality (SERVQUAL & LIBQUAL)
 - 4.1.4 Understanding User response to service failure.
- 4.2 Knowledge Management: Techniques and applications.
- 4.3 Project Management: PERT/CPMT

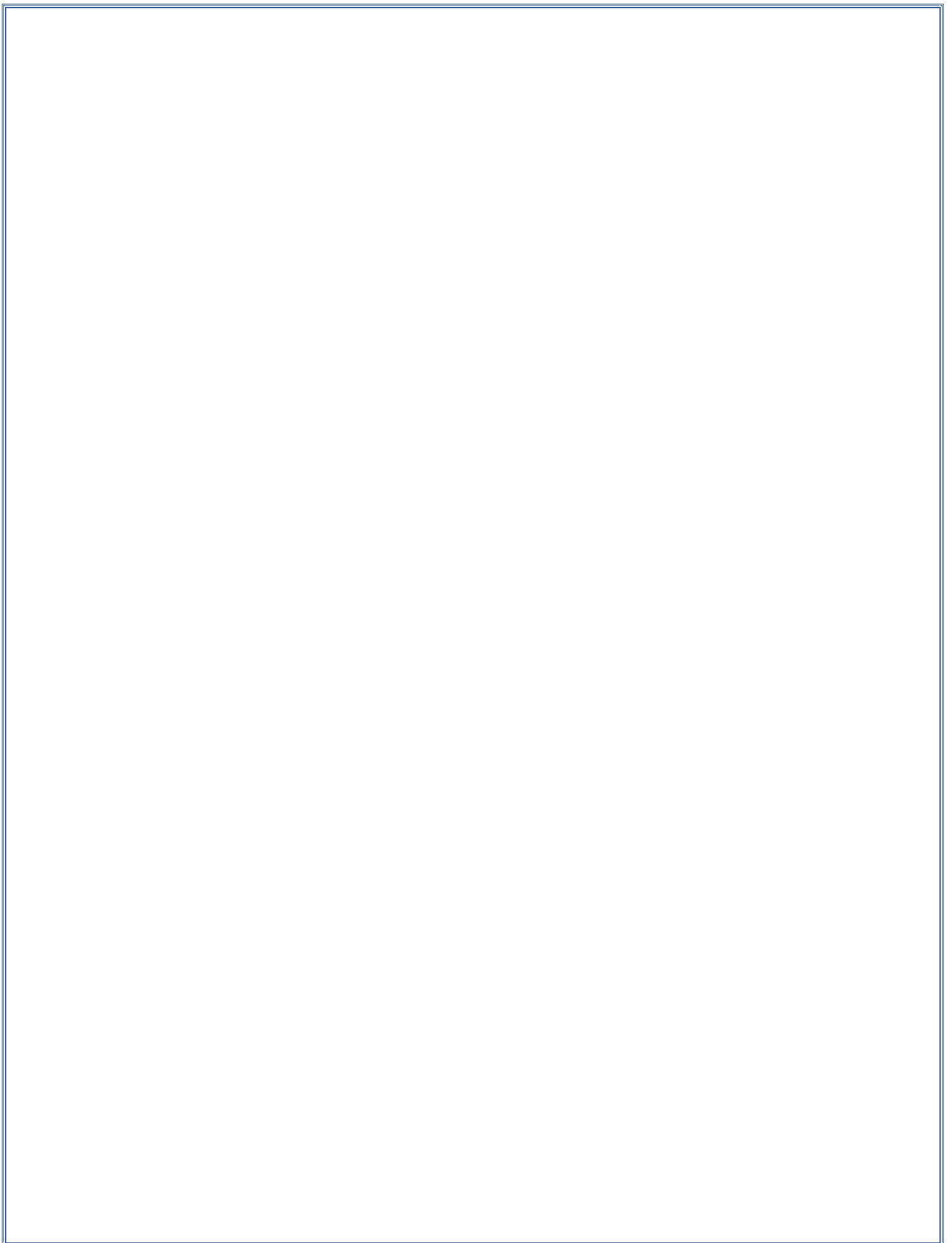
Suggested Readings

- Abell, A. (2001). *Competing with knowledge: The information professional in the knowledge management age*. London: Library Association Publishing.
- Arrow, K. J. (1984). *The economics of information*. Cambridge, Mass:Belknap Press of Harvard University Press.
- Bal-I Bara, N. (2000). *Competitive knowledge management*. New York:Palgrave.
- Beardwell, I. & Holden, L. Ed.(1996). *Human resource management: Contemporary perspective*. New Delhi
- Benbya,H (2008).*Knowledge Management Systems Implementation :Lessons from the silicon Valley*. Oxford: Chandos Pub
- Birchler, U. W., Butler, M. (2007).*Informationeconomics*.New York: Routledge.
- Bratton, J. and Gold, J. (1994). *Human resource management: Theory and practice*. Basingstoke: Mac Millan.
- Brigham, E. F.&Ehrhardt, M.C. (2004). *Financial Management: Theory and Practice*. Mason,OH: South Western College Pub.
- Brophy,P.(1986). *Management information and decision support systems in libraries*. Brookfield, vt., USA:Gower.
- Bryson, J. (1990). *Effective library and information centremanagement*.England: Grower.
- Chauvel, D.(2001). *Knowledge horizons: The present and promise of knowledge management* .Oxford : Butterworth-Heinemann
- Christian, A. R. (2013). *Academic library management: Universities, colleges an institutions*.Jaipur: Vista Publishers
- Dennis, A. & Wixom, B. H. (2002).*Systems analysis design*. New Jersey: Wiley
- Dessler, G. (2003). *Management: principles and practices for tommorrow's leaders*. New ersey: Prentice Hall.
- Du, W. (2013). *Informatics and management science I*. New York: Springer.
- Ein, D.P., & Jones, C. R. (1985). *Information system management: analytical tool and techniques*. N ew York: Elsevier.
- Evans, G.E. & Ward, P.L. (2003).*Beyond the Basics: A management guide for library and information professionals*. New York: Neal-Schuman Publishers.
- Evans, G.E. (2003). *Management techniques for libraries*.NewYork: Academic Press Farrell, R., & Schlesinger, K. (2013). *Managing in the middle: The librarian's handbook*. Griffin, R. (2005). *Fundamentals of Management (4thed.)*. Boston, MA: Houghton Mifflin.

- Hobohm, Hans- C. (2004). *Knowledge management: Libraries and librarians taking up the challenge* .Munchen : K. G . Saur
- Hoffer, J.A., George, J, F., &Valacich, J.S. (2004).*Modern systems analysis and design* . New Jersey: Prentice Hall.
- Hooda, O. P. (2008). *Financial management of college libraries*. New Delhi: Shree Publishers & Distributors.
- Jussawalla, M., &Ebenfield, H. (Ed.). (1984). *Communication and information economics* : New perspective. Amsterdam : Elsevier Science
- Kendall, K.E. & Kendall, J. E.(2004). *System analysis and design*. New Jersey: Prentice Hall.
- Kingma, B. R.(2001). *The economics of Information : a guide to economic and cost benefit analysis for information professionals* . Englewood, CO: Librarians .
- Kotlar, P.(2007). *Marketing for Non-profit organizations*. New Jersey: Prentice Hall. Krishna Kumar (1987). *Library administration and management*. Delhi: Viaks.
- Kumar, P.S.G. (2003). *Management of Library and Information Centres*. Delhi: B. R. Publishing corporation.
- Lambe, P (2007).*Organising Knowledge: Taxonomies, Knowledge and Organizational Effectiveness*. UK: Chandos
- Lancaster, F.W. (1988). *If you want to evaluate your library*. London: Library Association. Levine, D. K., &Lippman , S ,A. (1995). *The Economics of information* .Aldershot : Elgar
- Little , S . E.(2002). *Managing Knowledge : an essential reader*.London : Sage Publications
- Lovelock C.,&Wirtz,J .(2006).*Service Marketing: People, Technology, Strategy*. Pearson Education.
- Lubbe, J., C.A., V. (1997). *Information theory*. Cambridge: Cambridge university press.
- Mahapatra, P.(1997). *Library management*. Calcutta: World Press.
- Malcolm, G., &Leiter, R. D. (Ed).(1981). *Economics of information*. Boston: M.Nijhoff Pub.
- McDonough, A. M. (1963). *Information economics and management system*. New York:McGraw Hill. Milosevic,D.Z.(2003).*Project Management Toolbox*.NewJersey:Wiley
- Mittal, R.L. (1984).*Library administration: Theory and practice*. 4 Ed. New Delhi: Metropolitan.
- Mittal, R.L.(1984). *Library Administration: theory and practice*. (5thed.). Delhi: Metropolitan.
- Narayana,G.I..(1991).*Library and Information Management*. New Delhi: Prentice-Hall of India.
- Pandey, I. M. (2010). *Financial management*. New Delhi: Vikas Pub. House.
- Poll, R., Ramsdale, P., & Hansen, M. (2008). *Financial management in libraries*. London:Facet.
- Pugh,L(2007).*Change Management in Information Services(2nded)*.London:Ashgate pub.

- Pymm, B., & Hickey, D. D. (2003). *Learn library management*. Lanham, Md: Scarecrow Press.
- Raman, A.T. (2003). *Knowledge management:a resource book*. New Delhi:Excel Books.
- Ranganathan, S.R. (1954). *Library administration*. Bangalore: Sharada Ranganathan Endowment for Library Science.
- Roberts, S.A.(1985). *Cost management for library and information services*.London: Butterworths.
- Sanchez, R. (2001). *Knowledge management and organizational competence*. Oxford: Oxford University Press.
- Sehgal, P. C. (2004). *Financial management of university libraries in India*. Patiala: 21stCentury Publications.
- Selwyn, L., & Eldridge, V. (2013). *Public law librarianship: Objectives, challenges, and solutions*.
- Semprevivo, P. C. (1982). *System analysis:Definitions, Processes and design*.(2nd ed.). Chicago: Science Research Associates.
- Singh, A.R. (2001). *Information management in archives and libraries*.Delhi:Aakar.
- Stueart, R. D., Moran, B. B., &Morner, C. J. (2013). *Library and information center management*.
- Stueart, R.D. & Moran, B.B. (2004).*Library and information center management*.(6th ed.).U.S.A:Libraries Unlimited.
- Stueart, R.D. &Eastlick, J.T.(1981). *Library management*. (2nded.). Colarado: Libraries Unlimited.
- Swain, C. (2013). *Digital library management*. New Delhi: SSDN Publishers & Distributors.
- Swain, C., Satpathy, S. K., &Rautaray, B. (2013).*Strategic issues in library management*. NewDelhi: Avon Publications.
- Thanuskodi, S. (2013). *Challenges of academic library management in developing countries*. Hershey PA: Information Science Reference.
- Tripathi, P.C. & Reddy, P.N. (1991).*Principles of management*. New Delhi: Tata McGraw Hill.
- UNESCO(2005).*Towards Knowledge societies*.Paris:UNESCO
- Valacich, J.S., George, Joey. E. & Hoffer, J.A. (2003). *Essentials of system analysis and design* (2nded.). New Jersey: Prentice Hall.
- Velasquez, D. (2013). *Library management 101: A practical guide*.*Library management: Volume 29, Number 1/2, 2*. (2008). Bradford, England: Emerald.
- Wolpert, S.A., &Wolpert, J. F. (1986).*Economics of information*. New York : Van Nostrand Reinhold.
- Young,T(2008). *Knowledge Management for services,operations and manufacturing*. Oxford: Chandos Publication





LIS18202CR – KNOWLEDGE REPRESENTATION AND DISCOVERY

(Theory & Practice)

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
01	01	2	04

Course outcome

Student will be able to:

- Learn about different conventional and non-conventional information retrieval tools employed in library and information centers.
- Have know-how of different cataloguing systems viz. Centralized, Cooperative etc.
- Catalogue various types of information resources.

Unit-I

- U.1 Library Catalogue: Definition, Need, Purpose and Functions.
- U.2 Types of Catalogues: Dictionary Catalogue, Classified, Alphabetic Classed Catalogue.
- U.3 Physical Forms of a library catalogue: Conventional and Non -conventional: OPAC, WEBOPAC and Co-OPAC.)

I

Unit-II

- 2.1 Bibliographic Description Standards: AACR2R, RDA
- 2.2 Bibliographic Encoding Standards: MARC
- 2.3 Cooperative and Centralized Cataloguing: Objectives, different Forms with examples and Latest Trends.
- 2.4 Subject cataloguing: meaning, purpose, objectives
- 2.5 Principles of Subject Cataloguing: Contribution of Eminent Institutions/Authors (An Overview)

PRACTICE PART

Unit-III

- 3.1 Cataloguing of Documents with Single Authorship and Editorial Works.
- 3.2 Shared Authorship
 - 3.2.1 Documents written by up to three authors Principle author not indicated
 - 3.2.2 Documents written by more than three authors Principle Author Indicated

- 3.3 Documents written by more than three authors Principle author not indicated
Cataloguing of Documents with Pseudonym authorship,
- 3.4 Cataloguing of Multivolume collections

Unit-IV

- 4.1 Cataloguing of Serial Publications
- 4.2 Cataloguing of Non -Book Material
 - 4.2.1 Cartographic Materials
 - 4.2.2 Motion Pictures and Video Recordings.
 - 4.2.3 Electronic and web Resources
- 4.3 Sears List of Subject Headings

Suggested Readings

- Aswal, R. S. (2005). AACR2R with MARC21: Cataloging practice for 21st century. New Delhi: EssEss Publications.*
- Baker, B. B. (1993). Cooperative cataloging: Past, present, and future. New York: Haworth Press.*
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Pass, G. A., & Association of College and Research Libraries. (2002). *Descriptive cataloging of ancient, medieval, Renaissance, and early modern manuscripts*. Chicago: Association of College and Research Libraries.

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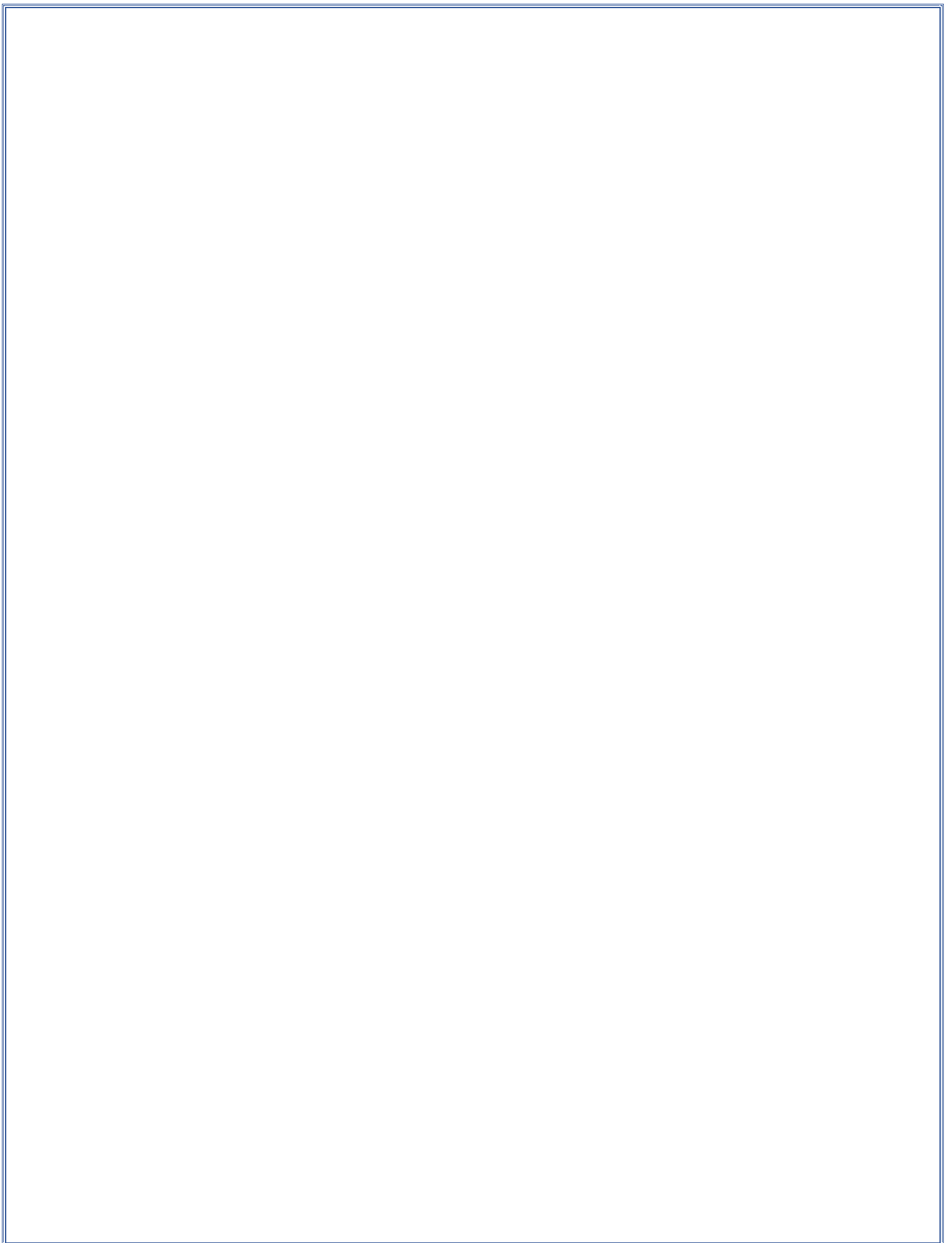
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New York, NY: Neal-Schuman Publishers.

Welsh, A., & Batley, S. (2012). Practical cataloguing: AACR, RDA and MARC21.

Zeng, M. L., Žumer, M., Salaba, A., & IFLA Working Group on the Functional Requirements for Subject Authority Records (FRSAR). (2011). Functional requirements for subject authority data (FRSAD): A conceptual model. Berlin: De Gruyter Saur.



LIS18203CR- INFORMATION SOURCES

(4 credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
2	1	1	4

Students learning outcome:

- The students will be able to offer appropriate information source to the user on the basis of the features and utility.
- The students will be familiar with the features and use of board array of online and print sources.

Unit-I Information Sources: An Overview

- 1.1 Information sources: Concept, print and online
- 1.2 Documentary (Primary, Secondary and Tertiary) and Non-documentary: Specialists, Experts, Consultants; etc
- 1.3 Evaluation: Criteria (online and offline resources)
- 1.4 Relate types of reference queries to their corresponding reference tools
- 1.5 Identification of sources of information as documentary and non-documentary in the Library and on the web
- 1.6 Evaluation of the select websites on the basis of standard criteria

Unit- II Reference Sources

- 2.1 Dictionaries-Types and uses
 - 2.1.1 Language dictionaries, Major online dictionaries
- 2.2 General Encyclopedias (Encyclopedia Britannica, Encyclopedia Americana), Subject specific encyclopedias (Access science, etc), Free online encyclopedias
- 2.3 Collaborative encyclopedias, Subject oriented wikis
- 2.4 Visit major online reference sources and explore the available features
- 2.5 Identify examples of each of the following on the web
Glossary, thesaurus and encyclopedic dictionary

Unit-III Geographical and Biographical Sources

- 3.1 Directories- Institutional (Europe World of Learning, Ulrich's periodical directory

- and Ulrich web, Commonwealth University yearbook
- 3.2 Biographical sources-utility and types (collective & individual).
- 3.3 Evaluation of International who's who, Current Biography, India Who's who)
- 3.4 Follow various information sources on the Twitter
- 3.5 Register for free trail in various online reference sources
- 3.6 Explore biographical Services online

Unit- IV Bibliographical Sources

- 4.1 Bibliography-need and types
- 4.2 Indexing and abstracting sources in science and social science
 - 4.2.1 Web of science and its other select products
- 4.3 E-aggregators, Databases
- 4.4 Locate indexing and abstracting services in web of science
- 4.5 Visit various open access resources in varied subject fields.

Note: The list of reference tools included is not comprehensive. An exhaustive list will be furnished in the class.

Suggested Readings

- Balay, Robert. (1996). *Guide to Reference Books*. (11th ed.). Chicago: A.L.A. Bonn, George S. (1971). Literature of Science and Technology. In *McGraw-Hill Encyclopedia of Science and Technology*, (8thed .V.7).New York: McGraw hill.
- Cheney, F.N. (1972). Encyclopedias. In *Encyclopedia of library and information Science* (vol. 8).New York: Marcel Dekker. (NA)
- Cheney, F.N. (1971). *Fundamental Reference Sources*. Chicago: A.L.A. Collison, R.L.(1968). *Bibliographies: Subject and National* .(3rd ed.).London: Crosby
- Foskett, O.J. (1967). *Information Service in Libraries*. 2nd ed. Connecticut: Archon Books.(NA)
- Grogen, D. (1987). *Case studies in Reference Work*. (6.Vols). London: Clive Bindley Hutchins, Margaret.(1944). *Introduction to Reference Work*. Chicago: A.L.A.
- Katz, William. (1982). *Introduction to reference work: Basic information Sources*. (7thed.).(V. 3).New York: McGraw Hill.
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- Mukherjee, A.K. (1975). *Reference Work and its Tools*. (3rd rev. ed.) Calcutta: World Press.

Sheehy, Eugene P. (Ed.). (1986). *Guide to Reference Books*. (10th ed.). Chicago: A.L.A.
Shores, Louis. (1954). *Basic Reference Sources*. Chicago: American Library Association. Sweetland,
James H. (2001). *Fundamentals of reference sources*. (3rd ed.). Chicago: A.L.A.
Walford, A.J. (1976). *Walford's Guide to Reference Materials*. (3rd ed.). London: Library Association.

Websites Illustrative:

Access Science from McGraw-Hill Education. Available at www.accessscience.com/

DOAJ -- Directory of Open Access Journals. Available at www.doaj.org/

DOAB: Directory of Open Access Books. Available at www.doabooks.org/

Ebook portals. Available at [bookleads - ebook portals](http://bookleads-ebookportals.com/)

Encarta Encyclopedia. Available at

www.encarta.msn.com/ Europa World of Learning

www.worldoflearning.com/views/advanced_search.html Library of Congress Catalogue. Available at

www.catalog.loc.gov/ List of online dictionaries

http://en.wikipedia.org/wiki/List_of_online_dictionaries List of online encyclopedias

http://en.wikipedia.org/wiki/List_of_online_encyclopedias Merriam Webster Online. . Available at

www.m-w.com/dictionary/ Onelook.dictionery, available at

www.onelook.com/ Online reference sources

<http://www.library.ualberta.ca/reference/index.cfm#biographies>

<http://www.lib.uchicago.edu/e/using/reference/genref.html#engdict>

Oxford English dictionary

www.oed.com/

Times Atlases - home of Times World Atlases and Maps www.timesatlas.com/

Ulrichsweb. Available at

ulrichsweb.serialssolutions.com/ VidyaNidhi. Available at

www.dspace.vidyanidhi.org.in:8080/dspace/ Wikipedia. Available at

wikipedia.org/

LIS18204CR -DIGITAL LIBRARY TECHNOLOGY

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	0	1	4

Course Outcomes

- The course provides an extensive knowledge about Digital Libraries and associated tools useful for managing digital libraries in an online environment with focus on understanding different Digital Library Software, resource discovery tools and digital preservation aspects.

Unit-I ***Introduction to Digital Libraries***

- 1.1 Digital Libraries: Introduction and Features.
- 1.2 Digital Library Resources and Five Laws of Library Science
- 1.3 Digital Libraries: Issues and Challenges
- 1.4 Digital library Initiatives: Overview of Digital Libraries at National and International level.

Unit-II ***Digital Library: Design and Management***

- 2.1 Digital Libraries: Planning and Design.
- 2.2 Web 2.0 and Digital Libraries.
- 2.3 Safeguarding Digital Library surrogates.
- 2.4 Digital Libraries and Open Education.

Unit-III ***Resource Discovery and Digital Library Software***

- 3.1 Interoperability and Metadata Standards.

- 3.2 Metadata Harvesting and OAI-PMH
- 3.3 Features and utilities of prominent Digital Library Software.

Unit-IV ***Digital Preservation***

- 4.1 Digital preservation: Need and Importance
- 4.2 Digital preservation initiatives at global level: An Overview
- 4.3 Cultural Heritage and Digital Preservation.

Suggested Readings:

- Ally, M., & Needham, G.(2010).*M2-Libraries:a virtual library in everyone's pocket*. London: Facet Pub.
- Baker, D., & Evans, W(2009).*Digital Library Economics and Academic Perspective*. Oxford: Chandos Pub
- Brown, A. (2013). *Practical digital preservation: A how-to guide for organizations of anysize*. London: Facet Pub.
- Caplan, P(2009).*Metadata Fundamentals for all librarians*. New Delhi: Indiana Pub.
- Calhoun, K. (2014). *Exploring digital libraries: Foundations, practice, prospects*. Available at <http://www.facetpublishing.co.uk/downloads/file/calhoun-ch1.pdf>
- Candela L., Castelli D., Ioannidis Y., Koutrika G., Pagano P., Ross S., Schek H., ... Schuldt H. (n.d.). *The digital library manifesto*. Available at https://www.coar-repositories.org/files/booklet21x21_manifesto_web.pdf
- Chowdhury, G. G., & Chowdhury, S. (2003). *Introduction to digital libraries*. London: Facet Pub.
- Deegan, M., & Tanner, S. (2006). *Digital preservation*. London: Facet.
- Dobrev, M., O'Dwyer, A., & Feliciati, P. (2012). *User studies for digital library development*. London: Facet.
- Eden, B. L. (2008). *Content management systems in libraries: Case studies*. Lanham, Md: Scarecrow Press.
- Furht, B. (2000). *Handbook of internet computing*. Boca Raton: CRC Press. Available at http://www.cse.fau.edu/~borko/Chapter18_ic.pdf
- Forde, H(2008).*Preserving Archives*. London: Facet Pub.
- Foulonneau, M., & Riley, J. (2008). *Metadata for digital resources: Implementation, systems design and interoperability*. Oxford: Chandos Pub.
- Ganguly, R.C.(2007).*Technology in Digital Libraries*. New Delhi: ISHA pub.

Greenstein, D. I., Thorin, S. E., Digital Library Federation., & Council on Library and Information Resources. (2002). *The digital library: A biography*. Washington: Digital Library Federation and Council on Library and Information Resources. Available at

<http://www.clir.org/pubs/reports/pub109/pub109.pdf>

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https://www.ideals.illinois.edu/bitstream/handle/2142/8339/librarytrendsv49i2f_opt.pdf?sequence=1

Gorman, G. E., & Shep, S. J (2006). *Preservation Management for Libraries, Archives and Museums*. London: Facet Pub.

Haynes, D (2004). *Metadata for Information Management and Retrieval*. London: Facet Pub.

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Hillmann, D. I., & Westbrook, E. L. (2004). *Metadata in Practice*. USA: ALA.

Hughes, L. M (2012). *Evaluating and Measuring the value, use and impact of Digital Collections*. London: Facet Pub.

IFLA/UNESCO Manifesto for Digital Libraries . Available at

<http://www.ifla.org/files/assets/digital-libraries/documents/ifla-unesco-digital-libraries-manifesto.pdf>

Jacobs, M. (2008). *Electronic resources librarianship and management of digital information: Emerging professional roles*. Binghamton, NY: Haworth Information Press.

John, J. L., & Digital Preservation Coalition. (2012). *Digital forensics and preservation*.

Kahn, R. E., Cerf, V. G., Corporation for National Research Initiatives., & Digital Library Project. (1988). *An open architecture for a digital library system and a plan for its development*. Reston, Va: Corp. for National Research Initiatives. Available at <http://www.cnri.reston.va.us/kahn-cerf-88.pdf>

Katz, B. (2003). *Digital Reference services*. New York: The Haworth Information press.

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- Lazinger, S. S., &Tibbo, H. R. (2001).*Digitalpreservation and metadata: History, theory, practice*. Englewood, Colo: Libraries Unlimited.
- Lazinger, Susan.S. (2001).*Digital Preservation and metadata* .Englewood: Greenwood. Lesk, M., &Lesk, M. (2004). *Understanding digital libraries*. Boston: Elsevier.
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- McMillan, G., Schultz, M., Skinner, K., & Association of Research Libraries.(2011).*Digital preservation*. Washington, D.C: Association of Research Libraries.
- Muir, A. (2013). *Legal and ethical issues in digital preservation*. Papy, F. (2008). *Digital libraries*. London, UK: ISTE Ltd.
- Rajasekharan, K., Nafala, K. M., Sen, B. K., & UNESCO, New Delhi. (2009). *Digital archiving of audio content using WINISIS and Greenstone software: A manual for community radio managers*. New Delhi: Communication and Information Sector, United Nations Educational, Scientific, and Cultural Organization.
- Seadle, M., &Greifeneder, E. (2007).*Defining a digital library*. *Library Hi Tech*, 25, 2, 169-173. DOI 10.1108/07378830710754938
- Soergel, D. (2009). *Digital Libraries and Knowledge Organization*.Available at [http://www.dsoergel.com/NewPublications/SoergelDigitalLibrariesandKnowledgeOrganization.p df](http://www.dsoergel.com/NewPublications/SoergelDigitalLibrariesandKnowledgeOrganization.pdf)
- Talawar, V. G., Biradar, B. S., Savanur, Kiran P., &Nagaraj, M. N. (2004). *Design and Implement of Digital Library: an overview*. ASSIST.Available at <http://eprints.rclis.org/8432/1/ASSIST.pdf>

Terry, R., & Banerjee, Kyle (2008). Building Digital Libraries. New York: Neal-Schuman

Tyagi, D. (2013). Digital library preservation strategies. New Delhi: Random Publications.

Vries de, A.P., Eberman, B., & Kovalcin, D.E. (1998). The design and implementation of an infrastructure for multimedia digital libraries. Available at

<http://doc.utwente.nl/18634/1/00694364.pdf>

Witten, I. H., & University of Waikato. (2005). StoneD: A bridge between Greenstone and DSpace.

Hamilton, N.Z: Dept. of Computer Science, University of Waikato.

Witten, I. H., Bainbridge, D., & Nichols, D. M. (2010). How to build a digital library. Burlington, MA: Morgan Kaufmann Publishers.

Zeng, M.L., & Qin, J. (2008). Metadata. New York: Neal-Schuman

LIS18205DCE - DISASTER MANAGEMENT AND PREPAREDNESS IN LIBRARIES

4 credits

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcome

Students will be able to:

- Have good understanding of different types of disasters that can affect libraries and information centers.
- Prepare in advance to tackle anticipated disasters with scientific approach and minimal damage to the precious resources housed in library, archives and information centers.

Unit-I DISASTER AND ITS MANAGEMENT: AN OVERVIEW

- 1.1 Disaster –Concept, types and Impact
- 1.2 Disaster Management and its importance
- 1.3 Disaster Management in Libraries

Unit-II DISASTER RISK ASSESSMENT AND PREVENTION

- 2.1 Risk Assessment
 - 2.1.1 Risks from outside the building
 - 2.1.2 Risks from the building structure and services
 - 2.1.3 Risks from human interference
- 2.2 Prevention and Protection
 - 2.2.1 The vicinity of the buildings & the building structures
 - 2.2.2 Security, storage systems, water&fire

Unit-III DISASTER PREPAREDNESS

- 3.1 Preparedness
 - 3.1.1 Drawing up a Disaster Preparedness Plan
 - 3.1.2 Roles of disaster Response team members
 - 3.1.3 Staff training

- 3.1.4 Identifying and making appropriate arrangements for a 'recovery 'area
- 3.2 Reaction and Response
 - 3.2.1 Primary response
 - 3.2.2 Main disaster response

Unit-IV *DISASTER RECOVERY*

- 4.1 Recovery
 - 4.1.1 Identifying damaged materials
 - 4.1.2 Shifting damaged materials to the recovery area
 - 4.1.3 Sorting materials for treatment
 - 4.1.3 Treatment of materials
- 4.2 Initiating Services to users from Recovery area
- 4.3 Assessing Damages to the building and Collections and negotiating with the Insurers

Suggested Readings

- Alegbeleye, Bunmi(1993 .)Disaster Control Planning for Libraries, Archives and Electronic Processing Centres in Africa .Ibadan :Options Book and Information Services.*
- Alire, Camila, ed(.2000 .)Library Disaster Planning and Recovery Handbook .New York :Neal-Schuman Publishers.*
- Ashman, John (1995 .)Disaster Planning for Library and Information Services .London :Aslib.*
- Canadian General Standards Board (2002 .)Emergency Planning for Industry .CAN/CSA Z731-95 (R2002 .)Canada National Standard/Canadian Standards .Ottawa :Canadian General Standards Board.*
- Dorge, Valerie and Sharon Jones, compilers (2000 .)Building an Emergency Plan :A Guide for Museums and Other Cultural Institutions .Marina del Rey, California :Getty Conservation Institute.*
- Fortson, Judith (1992 .)Disaster Planning and Recovery :A How-To-Do-It Manual for Librarians and Archivists .New York :Neal-Schuman Publishers.*
- Fox, Lisa L (1989 .)Management Strategies for Disaster Preparedness.InThe ALA Yearbook of Library and Information Services 14:1-6.*

Higginbotham, Barbra Buckner, and Miriam B. Kahn (1995). *Disasters for Directors: The Role of the Library or Archives Director in Disaster Preparedness and Recovery*. In *Advances in Preservation and Access, Vol. 2*, Barbra Buckner Higginbotham, ed., 400-412. Medford, New Jersey: Learned Information, Inc.

ICA Committee on Disaster Prevention (1997). *Guidelines on Disaster, Preservation and Control in Archives*. ICA Studies. Paris: International Council on Archives.

Jones, Virginia A., and Kris E. Keyes (2001). *Emergency Management for Records and Information Programs*. Prairie Village, Kansas: ARMA.

Kahn, Miriam (2002). *Disaster Response and Planning for Libraries, Second edition*. Chicago, Illinois: American Library Association.

Koch, Corine, editor and translator (2003). *The Blue Shield for the Protection of our Endangered Cultural Heritage*. Proceedings of PAC Open Session at the 68th General IFLA Conference in Glasgow, 2002. Co-organized by PAC and National Libraries Section. International Preservation Issues, Number Four. Paris: IFLA/PAC. <http://archive.ifla.org/VI/4/ipi.html>

Lyll, Jan (1996). *Disaster Planning For Libraries and Archives: Understanding the Essential Issue*. In *The Electronic Magazine 1.2*. <http://www.nla.gov.au/nla/staffpaper/lyall1.html>

Marelli, Nancy (1991). *Les Sinistres: prevention et planification d'urgence, comment prevenir la perte des documents d'une organisation lors d'un sinistre*. *Archives* 22(3):3-28.

Matthews, Graham and John Feather, editors (2003). *Disaster Management for Libraries and Archives*. Aldershot, Hampshire: Ashgate Publishing.

National Archives and Records Administration, Office of Records Administration (1996). *Vital Records and Records Disaster Mitigation and Recovery*. College Park, Maryland: NARA.

National Fire Protection Association (2000). *NFPA 1600 - Standard for Disaster/Emergency Management and Business Continuity Programs*. Translated into Spanish.

<http://www.nfpa.org>

National Institute for the Conservation of Cultural Property (1997). *Emergency Response and Salvage Wheel*. 1997. Washington, D.C.: National Institute for the Conservation of Cultural Property, produced in cooperation with the National Task Force on Emergency Response, an initiative of the Federal Emergency Agency, The Getty Conservation Institute, and the National Institute for the Conservation of Cultural Property. Translated into Chinese, Dutch, French, Japanese and Spanish

<http://www.heritagepreservation.org/PROGRAMS/Wheel1.htm>

Norris, Debbie Hess (1998). *Disaster Recovery .Salvaging Photograph Collections .Philadelphia, Pennsylvania :Philadelphia Conservation Centre for Art and Historic Artifacts.*

Ogden, Sherelyn, ed. (1999). *Preservation of Library and Archival Materials: A Manual, Third edition. Andover, Massachusetts: Northeast Document Conservation Center.*

Smithsonian Institution, et al, compilers (1993). *A Primer on Disaster Preparedness, Management and Response: Paper-Based Materials .1993 Washington, D.C .:Smithsonian Institution, National Archives and Records Administration, Library of Congress and National Park Service .Translated into Spanish .*

<http://sul-server-2.stanford.edu/bytopic/disasters/primer/>

Stovel, Herb (1998.) *Risk Preparedness :A Management Manual for World Cultural Heritage .Rome : ICCROM.*

Sturges, Paul and Diana Rosenberg, eds. (1999). *Disaster and After: The Practicalities of Information Service in Times of War and Other Catastrophes .1999 Proceedings of an International Conference sponsored by IGLA., 4-6 Sept .1998, University of Bristol .London :Taylor Graham Publishing.*

Trinkley, Michael (1993 .) *Hurricane !Surviving the Big One :A Primer for Libraries, Museums, and Archives .Atlanta :Southeastern Library Network, Inc(.SOLINET.)*

Uchanan, Sally A (1988 .) *Disaster Planning :Preparedness and Recovery for Libraries and Archives .A RAMP Study (PGI-88/WS/6 .)Paris :UNESCO .*

<http://www.unesco.org/webworld/ramp/html/r8806f/r8806f00.htm>

Van der Hoeven, Hans and Joan van Albada(199 .) *Memory of the World :Lost Memory -Libraries and Archives Destroyed in the Twentieth Century (CII-96/WS/1 .)Paris :UNESCO.*

Walsh, Betty (1997 .) *Salvage Operations for Water Damaged Archival Collections :A Second Glance and Salvage at a Glance .WAAC Newsletter 19(2:)12-23.*

<http://palimpsest.stanford.edu/waac/>

Wellheiser, Johanna and Jude Scott. With John Barton (2002). *An Ounce of Prevention :Integrated Disaster Planning for Archives, Libraries and Record Centers, Second edition .Lanham, Maryland and Ottawa :Scarecrow Press and Canadian Archives Foundation.*

LIS18206DCE-UNIVERSITY LIBRARY SYSTEM

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course outcomes:

- This paper will help the student to know the different facets of university library system.
- Students shall be acquainted students with University Library system it's Components, Services and problems

Unit-I University Library

- 1.1 University Libraries: Concept, Need & Importance
- 1.2 University Libraries: Mission & Goals
- 1.3 Functions and Objectives

Unit-II University Library: Components

- 2.1 Collection
- 2.2 Staff.
- 2.3 Finance,
- 2.4 Physical Infrastructure, users, etc.

Unit-III University Library: Services

- 3.1 Services in modern era
- 3.2 Role of ICT in University Libraries
- 3.3 E-Learning in University set-ups

Unit-I University Library: problems

- 4.1 Role of UGC in promoting university libraries
- 4.2 Problems faced by university libraries

4.3 Model university libraries – features

Suggested Readings:

Buckland, M. K. (2014). *Library services in theory and context*. Elsevier.

Kraft, D. H. (1983). *The journal selection problem in a university library system*. Ram, M. (2015). *University library system*.

Schotter, A. (2008). *The economic theory of social institutions*. Cambridge Books.

Tejeda-Lorente, Á., Porcel, C., Peis, E., Sanz, R., & Herrera-Viedma, E. (2014). A quality based recommender system to disseminate information in a university digital library. *Information Sciences*, 261, 52-69.

Xiaoling, Y. A. N. G. (2015). Analysis on the Bookseller's Influence on Literature Acquisition of University Library. *Sci-Tech Information Development & Economy*, 18, 001

LIS18207DCE-PRESERVATION AND CONSERVATION TECHNIQUES
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course outcomes:

- The students will be familiar with the field of preservation and conservation. Its importance in the age of fast technological obsolescence.
- The students will plan the preservation activities and can set up preservation labs for the rehabilitation of the document in their respective workplaces.

Unit-I

- 1.1 Preservation/conservation: purpose, components and Implications.
- 1.2 Principle carriers of information: major causes of loss, damage, deterioration, current methods and best practice for loss preventing or mitigating.

Unit-II

- 2.1 Preservation program in libraries and archives: core activities
- 2.2 Understand the principles of preservation assessment and planning, including budgeting for preservation activities.

Unit-III

- 3.1 Digital preservation: Foundation
- 3.2 Strategies of Digital preservation
- 3.3 Large-scale digital preservation initiatives (LSDIs)

Unit-IV

- 4.1 Digital preservation: Issues and challenges
- 4.2 Threats to Digital Materials
- 4.3 Organizational Issues & Resourcing Issues

Suggested Readings

Roberts, Matt T. and Don Hetherington, *Bookbinding and the Conservation of Books: A Dictionary of Descriptive Terminology*.

<http://palimpsest.stanford.edu/don/don.html>

Northeast Document Conservation Center (NEDCC) Preservation leaflets,

<http://nedcc.org/resources/leaflets.list.php>

Handling Rare Materials. YouTube: Folger Shakespeare Library, 28 June 2011.

<http://www.youtube.com/watch?v=5NWYruNYILw>

Meeting the challenge of media preservation: Strategies and solutions. Indiana University Bloomington Media Preservation Task Force, Aug 2011. Read chapters 4 and 5.

<http://www.indiana.edu/~medpres/>

Definitions of Digital Preservation. Chicago: American Library Association Preservation and Reformatting Section, 2007.

<http://www.ala.org/ala/mgrps/divs/alcts/resources/preserv/defdigpres0408.cfm>

Digital Preservation FAQs. National Archives [UK].

<http://www.nationalarchives.gov.uk/information-management/projects-and-work/digital-preservation-faqs.htm>

Kenney, Anne R., Nancy Y. McGovern, et al. *Digital Preservation Management: Implementing Short-Term Strategies to Long-Term Problems*, online tutorial:

<http://www.icpsr.umich.edu/dpm/>

Barateiro, José, Gonçalo Antunes, Filipe Freitas, and José Borbinha. Designing digital preservation solutions: A risk management-based approach. *The International Journal of Digital Curation* 5.1 (2010).

<http://www.ijdc.net/index.php/ijdc/issue/archive>

Northeast Document Conservation Center (NEDCC) Preservation leaflets,

<http://nedcc.org/resources/leaflets.list.php>

Model Preservation Policies for Ohio's Cultural Heritage Institutions

<http://cdm16007.contentdm.oclc.org/cdm/landingpage/collection/p16007coll7>

Calvi, Elise, Yvonne Carignan, Liz Dube, and Whitney Pape. *The preservation manager's guide to cost analysis.* Chicago: ALCTS/PARS American Library Association, 2006. Chapter 3: *Identifying and calculating costs*, pp. 7-28. Posted on the CTools site, <https://ctools.umich.edu/portal>

Simpson, Duncan, *Contracting out for digital preservation services: information leaflet and checklist.* *The Digital Preservation Coalition*, 2004. <http://www.dpconline.org/advice/dpc-reports> [scroll to the bottom of the page to find the link under DPC Guides]

Lacinak, Chris, *Project outsourcing: Navigating the client/vendor relationship to achieve your project goals.* Brooklyn, NY: AudioVisual Preservation Solutions, 2006.

<http://www.avpreserve.com/avpsresources/papers-and-presentations/>

Smith, Abby. Valuing preservation. Library Trends 56.1 (Summer 2007) 4-25. Access via U-M Library/Project Muse: http://muse.jhu.edu/journals/library_trends/ [accessible from a U-M IP address or via login to the University Library]; a pdf copy is posted to the class CTools site,

<http://ctools.umich.edu>

Bradley, Kevin. Defining digital sustainability. Library Trends 56/1 (2007): 148-63. Posted on the CTools site, <https://ctools.umich.edu/portal>

*Courant, Paul N., and Matthew “Buzzy” Nielsen. On the cost of keeping a book. In *The idea of order: Transforming research collections for 21st century scholarship*, Washington, D.C. Council for Library and Information Resources (June 2010): 81-105.
<http://www.clir.org/pubs/abstract/pub147abst.html>*

Demas, Sam, and Wendy Lougee. Shaping a national collective collection: Will your campus participate? Library Issues, 31.6 (July 2011).

<http://samdemasconsulting.com/wp-content/uploads/2011/08/LibraryIssues-Article-July-20112.pdf>

DIGITAL PRESERVATION RESOURCES

*Digital Public Library of America (DPLA) Self-Guided Curriculum for Digitization
National Digital Information Infrastructure and Preservation Program*

The Signal: Digital Preservation Digital Curation Centre

**LIS18208DCE -WEB TECHNOLOGIES AND TECHNIQUES:
HEALTH INFORMATION NETWORK SYSTEMS**

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course outcome:

- The paper will help the students to specialize in the field of Health Librarianship and help them to deal with various health information setups.

UNIT-I

- 1.1 Health Information System Networks: Introduction
- 1.2 Health Information System Networks: Types
- 1.3 Health Institutions and Information Processing

UNIT-II

- 2.1 Organizational Structures of Information Management in Health Care Networks
- 2.2 Healthcare Information Management Systems
- 2.3 Ethical and Legal Issues in health Information Networks

UNIT-III

- 3.1 Health Science Librarians and Health Informatics
- 3.2 New Roles and Opportunities
- 3.3 Health Science Librarians and Research

UNIT-IV

- 4.1 Quality of Health Information Systems
- 4.2 Strategic Information Management in Health Care Networks
- 4.3 HIT Impact on Patient Safety

Suggested Readings

Anna D. Cleveland & Donald B. Cleveland. (2009). *Health Informatics for Medical Librarians*. New York: Neal-Schuman Publishers

Kathryn J. Hannah & Marion J. Ball. (Series Editor). (2011). *Health Information Systems Architectures and Strategies*. London: Springer.

Lyn Robinson. (2010). *Understanding Healthcare Information*. London: Facet Publishing.

M Sandra Wood. (2008). *Introduction to health science librarianship*. London: Routledge, Taylor and Francis.

Pacific Health Information Network. (n.d). *Health Information Systems (HIS)*.

Availavble at: <http://phinnetwork.org/resources/health-information-systems-his/>

Rajesh Kumar Sinha & Archana Sinha. (2015). *Knowledge, Attitude and Practice of Health Information System*. *Journal of Health Management*, 17(4) 425–437. DOI: 10.1177/0972063415606268

World Health Organization. (2008). *Health Information Systems*. Available at:

LIS18002GE-CITATION AND REFERENCE MANAGEMENT SOFTWARE

(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
2	0	0	2

Course Outcome

- The course tends to inculcate research ethics with focus on understanding importance of reference management in academic writings and practical demonstration of different reference management software and referencing styles.

t: Concept and Importance

- Unit-I**
- 1.2 Reference Management Software: Zotero, Mendeley, EndNote, Refworks, etc.
 - 1.3 Citation and Referencing Styles (APA, MLA, etc.)

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Unit-II

- 2.1 Primary Literature Indexing Databases: Web of Science, Scopus, Google Scholar etc.
- 2.2 Mendeley: Features and functions.
- 2.3 Mendeley: Management, synchronization, generating citations, bibliography, creating groups, etc.

Suggested Reading

Prasad, M. R. M. (2017). Usage of References and Its Management in Research.

Shapland, M. (2000). Evaluation of reference management software on NT comparing Papyrwith Procite, Reference Manager, Endnote, Citation, GetARef, Biblioscape, Library Master, Bibliographica, Scribe, Refs [online]. University of Bristol.

Illustrative websites

*Mendeley (2017). Available at
<https://www.mendeley.com/>*

Mendeley. (2013). New York: Elsevier.

*SCOPUS (2017). Available at <https://www.elsevier.com/solutions/scopus> Web of Science (2017).
Available at apps.webofknowledge.com*

LIS18002OE INFORMATION LITERACY: BASICS
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

Course outcomes

- The paper will Acquaint the student with various literacy skills required for knowledge exploration, retrieval and dissemination.
- Students will be acquainted with the concept of Information Literacy, its role and impact on modern Libraries and on student's information seeking behavior.

Unit-I *Information Literacy: Introduction and importance*

- 1.1 Information Seeking Behavior: Overview
- 1.2 Information Literacy: Concept, Need and Objectives
- 1.3 Areas of Information Literacy
- 1.4 Standards in Information Literacy

Unit-II *Information Literacy and Libraries*

- 2.1 Role of Libraries in promoting Information literacy
- 2.2 Impact of information literacy on the use and services of library resources
- 2.3 Information Literacy Products: Library Brochures, Pamphlets etc.

Suggested Readings

Grassian, E. S., &Kaplowitz, J. R. (2009). *Information literacy instruction: Theory and practice*.
New York: Neal-Schuman Publishers.

Iannuzzi, P., Mangrum, C. T., &Strichart, S. S. (1999). *Teaching information literacy skills*.
Boston: Allyn and Bacon.

Mackey, T. P., & Jacobson, T. E. (2011). *Teaching information literacy online*.
Wilson, G., & Solomon, A. (2015). *100% information literacy success*.

Watts, M. M. (2008). *Information literacy: One key to education*. San Francisco, CA: Jossey-Bass.



3rd Semester

Semester III**3rd Semester**

Course Code	Course Title	Paper Category	L	T	P	Credits
LIS18301CR	Information Retrieval	Core	03	01	0	04
LIS18302CR	Information Technology (Practice)	Core	03	01	0	04
LIS18303CR	Information Systems & Services	Core	03	01	0	04
LIS18304CR	Scholarly Communication & Publishing Ethics	Core	03	01	0	04
LIS18305DCE	Open Access Environment	Discipline Centric Elective	03	01	0	04
LIS18306DCE	Agriculture Information System	Discipline Centric Elective	03	01	0	04
LIS18307DCE	Web 2.0 Advanced Technology	Discipline Centric Elective	03	01	0	04
LIS18308DCE	Open Source Technology	Discipline Centric Elective	03	01	0	04
LIS18003GE	Web Resources for Research	Generic Elective	01	01	0	02
LIS18003OE	Information Literacy – Advanced	Open Elective	01	01	0	02

LIS18301CR-INFORMATION RETRIEVAL

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcome

- The paper will educate the students about whole spectrum of IRs including the traditional as well as online IRs and help them as professionals to select and offer an appropriate IR System in terms of efficiency.
- The paper will be also be of great help to the students who expect to take IR as a career choice both academically as well as professionally to brush up their knowledge in various areas of IR.

Unit-I

- 1.1 Information Retrieval: Concept, Features, Genesis & Development.
- 1.2 Trends in Indexing: Automatic Indexing etc.

Unit-II

- 2.1 Subject Indexing and Vocabulary Control: Concept and Need.
- 2.2 Subject Heading Lists,
- 2.3 Thesaurus: Structure and Functions

Unit-III

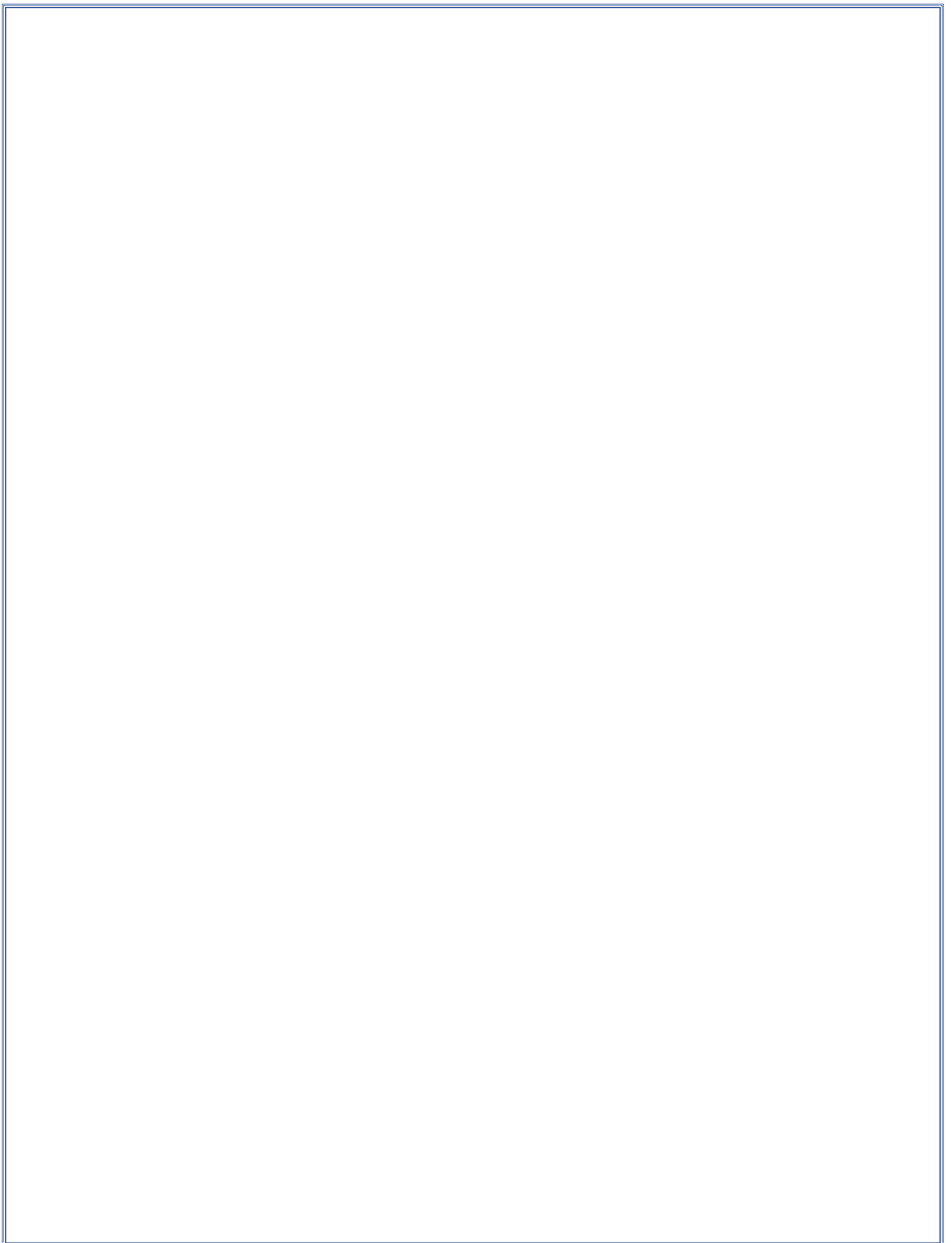
- 3.1 Pre-coordinate Indexing Systems
 - 3.1.1 Chain Indexing.
- 3.2 Post-Coordinate Indexing Systems
 - 3.2.1 UNITERM Indexing System.

Unit-IV

- 4.1 Citation Indexing: Concept and development.
 - 4.1.1 Online Citation Indexing Tools: SCOPUS, Web of Science.
- 4.2 Information Retrieval Systems: Types
- 4.3 Evaluation of Information Retrieval Systems: Methods and Parameter.

Suggested Readings

- Chodhury, C.G. (2004). *Introduction to Modern Information Retrieval*. (2nded.). London: Facet Pub.
- Cleveland, D. B., & Cleveland, A. D.(1990) *Introduction to Indexing and Abstracting*. (2nd ed.). USA: University of Michigan.
- Chu, S.K.W., & Law, N. (2006). Development of information search expertise: Research students' knowledge of source types. *Journal of Librarianship and Information Science*, 39 (1), 27-40.
- Dhawan, K.S. (1997). *Principles of information retrieval*. New Delhi: Commonwealth
- Foskett, A.C. (1996). *The subject approach to information* (5th ed.) .London: Library Association.
- Jones, K. S. (1981). *Information retrieval experiment*. London: Butterworth.
- Kiewitt, E. L. (1979). *Evaluating information retrieval systems: the probe program*. London: Greenwood.
- Lancaster, F.W. (2003). *Indexing and Abstracting in Theory and practice* (3rd ed.). London: Facet Pub.
- Meadow, C. T. (1967). *The analysis of information systems*. New York: John Wiley.
- Riaz, M. (1991). *Advanced indexing and Abstracting*. New Delhi: Atlantic
- Rajan, T. N. (1981). *Indexing systems: Concepts, Models & techniques*. Calcutta: IASLIC.
- Ranganathan, S. R. (1973).*Documentation: Genesis and Development*. Delhi: Vikas Pub.
- Rijsbergen, J. V. (1979). *Information retrieval* (2nd ed.). London: Butterworths.
- Smiraglia, R. P. (2002). *Works as entities for information retrieval*. New York: Haworth.
- Vickery, B.C. (1970).*Techniques of Information Retrieval*.(2nd ed.). London: Butterworth.
- Wessel Andrew, E. (1974). *Computer aided Information Retrieval*. Los Angeles: Melville Pub.



LIS18302CR-INFORMATION TECHNOLOGY (PRACTICE)

(4 credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
0	0	4	4

Course Outcome

- The course is framed keeping in view the essence of building the practical IT foundation among the students in order to make them comfortable in working on different operating systems, office package tools and libre office.

Unit-I

1.1 MS DOS

Practical 1.1.1 Introduction to DOS Command Prompt. Working with Directory commands MD, CD, RD, and TREE.

Practical 1.1.2 Introduction to Internal DOS Commands

Practical 1.1.3 Introduction to External DOS Commands

Practical 1.1.4 Batch Commands and XCopy commands.

Practical 1.1.5 Wild cards in Dos and Dos help.

1.2 WINDOWS (latest available)

Practical 1.2.1 Introduction to Windows, Windows Desktop, Icons, Taskbar and Start Button.

Practical 1.2.2 Using Scroll Bars, Dialog Boxes and Toolbars, Files and folders.

Practical 1.2.3 Using Control Panel for customizing Windows.

Practical.1.2.4 Introduction to Windows Accessories, Search and Run Features.

Practical 1.2.5 Add remove Programs/Hardware

Unit-II

2.1 MS WORD (latest available)

Practical 2.1.1 Creating and editing a document.

Practical 2.1.2 viewing and Inserting various objects and utilities in document.

Practical 2.1.3 Formatting a document with different attributes

Practical 2.1.4 Tools for Security, Letters and Mailing.

Practical 2.1.5 Designing and insertion of different tables etc

2.1 MS EXCEL (latest available)

Practical 2.2.1 Introduction to Creation, Editing and Saving of Excel. Workbooks and Workspaces. Inserting worksheets, rows and columns. Working with Cells and Ranges.

Practical 2.2.2 Working with Excel Functions like Date and Time, Math and Trig, Statistical, Text and Logic.

Practical 2.2.3 Working with Excel Charts.

Practical 2.2.4 Changing worksheet Layout, Other Formatting Options.

Practical 2.2.5 Goal Seek and Creation of Lists.

Unit-III

3.1 MS ACCESS (latest available)

Practical 3.1.1 Creating a Blank Database in Access.

Practical 3.1.2 Working with Tables using design view, using wizard and by entering data.

Practical 3.1.3 Creating Queries

Practical 3.1.4 Understanding relationships.

Practical 3.1.5 Creating Forms.

Unit-IV

4.1 LibreOffice

Practical 4.1.1 Introducing and Setting Up LibreOffice.

Practical 4.1.2 Getting Started with Writer.

Practical 4.1.3 Getting Started with Calc.

Practical 4.1.4 Getting Started with Impress.

Practical 4.1.5 Getting Started with Draw and Base

Suggested Readings:

Andersen, V.(2003).*How to do everything with Microsoft Office Access 2003*.New York: McGraw Hill

Cooper, J. (2002). *Using MS-DOS 6.22(3rd ed)*. Indianapolis, Ind: Que.

Fehily, C. (2005). *WindowsXP*. Berkeley, CA: Peachpit.

Flynn, M.(2004). *Microsoft Access 2003 expert certification*.EMCparadigm Pub.

Grauer, R. T., & Barber, M. (2006).*Microsoft Office Excel 2003: Comprehensive (Rev ed)* .
NJ: Pearson/Prentice Hall.

Gunter, S. K. (2007). *Teach yourself visually Office 2007*. Indianapolis, IN: Wiley Pub., Inc.

Hart-Davis, G., (2003). *How to do everything with Microsoft Office Excel 2003*.New York: McGraw Hill.

Harvey, G. (2010). *Excel 2010 all-in-one for dummies*. Hoboken, NJ: Wiley Pub. Harvey, G. (2010).
Excel 2010 all-in-one for dummies. Hoboken, NJ: Wiley Pub.

Kinkoph, S. (2004) .*Teach yourself visually Windows XP*.NJ: Wiley Pub.

Marmel, E. J. (2013). *Teach yourself visually Office 2013: The fast and easy way to learn*.
Indianapolis, IN: John Wiley & Sons, Inc.

Mathews, M. S., & Mathews C. (2007) *Microsoft Office Word 2007Quicksteps*. New York: McGraw-Hill.

Mathews, M.S.,&Cronan, J. (2005).*Microsoft Office Word 2003*.New York: McGraw Hill.

Matthews, C. B., Matthews, M. S., &Cronan, J. (2010). *Microsoft Office 2010 quicksteps*. New York: McGraw-Hill.

McFedries, P. (2009). *Teach yourself visually Windows 7*. Indianapolis, IN: Wiley Pub.

McFedries, P. (2012). *Windows 8 simplified*.Indianapolis, IN : John Wiley & Sons, Inc., [2012] ©2012

McFedries, P.(2005).*Teach yourself visually Windows XP. (2nd ed)*.NJ: Wiley Pub. Moran, R.,
&Johnson, K. (2003).*Windows XP*.NJ: Willey Pub.

Muir, N. (2007). *Teach yourself visually Excel 2007*. Hoboken, N.J: Wiley.

Norton, P. (1996). *Peter Norton's Dos Guide*.Indianapolis, Ind: Brady.

Pogue D. (2006). *Windows XP for starters*.Sebastopol, CA: Pogue. Pogue, D. (2013). *Windows 8*.Beijing ; Sebastopol, CA O'Reilly, [2013]

- Preston, J. H., Preston, S, & Ferett, R. L (2003)..*Go! With Microsoft Office Word 2003*.NJ: Pearson/Prentice Hall.
- Rathbone, A. (2009). *Windows 7 for dummies*. Hoboken, N.J: Wiley.
- Rathbone, A. (2012). *Windows 8 for dummies*. Hoboken, N.J: John Wiley & Sons.
- Rutkosky, N., & Seguin D. (2004). *Microsoft Access 2003*.St.Paul, MN: EMC/Paradigm.
- Rutkosky, N. H., & Seguin, D.(2004).*Microsoft Excel 2003*.St.Paul, MN: EMC/Paradigm.
- Rutkosky, N., & Seguin D.(2004).*Microsoft PowerPoint 2003*.St.Paul, MN: EMC/Paradigm.
- Shoup, K. (2010). *Teach yourself visually Office 2010*. Indianapolis, Ind: Wiley Pub., Inc.
- Stephen, M. (2007). *Excel 2007*. London: Teach Yourself.
- Tidow, R., Clark, David J., & Toot, M. S.(2005).*Master visually Windows XP.(Service pack 2nded)* NJ: Wiley Pub
- Ulrich, L. A. (2003).*How to do everything with Microsoft Office 2003*. New York: McGraw Hill
- Wang, W. (2010). *Office 2010 for dummies*. Hoboken, N.J: Wiley.
- Wyatt, A.(1993).*Using MS-DOS 6.2*.Carmel, IN: QUE.

Websites (Illustrative):

LibriOffice. (2017). Available at <https://www.libreoffice.org>

*Office 2007 Tutorials available at Florida Gulf Coast University.
<https://veasnarincambodia.files.wordpress.com/2011/08/4-word-2007-tutorial.pdf>*

*Office.2010. ESSENTIAL MICROSOFT OFFICE 2010™ Tutorials for Teachers
<http://www.pitt.edu/~poole/Office2010Tutorials/FrontMatter.pdf>*

Office 2010. ESSENTIAL MICROSOFT OFFICE 2010™ Tutorials for Teachers

<https://support.office.com/en-us/article/Download-Office-2010-training-7F477C0F-D72F-4848-B960-98BF08D779AB>

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LIS18303CR- INFORMATION SERVICES AND SYSTEMS

(4 Credits)

Credit

Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course outcome

After completion of this course, student will able to:

- Learn about various types of information and documentation centers with their unique role for promotion of knowledge in their respective sectors.
- Have thorough know-how of initiating different reference and information services that can be offered to diverse user bases in different library settings.

Unit-I

- 1.1 Reference & Information Service: Concept, Need and Development.
- 1.2 Online Reference & Information Service: Concept and techniques.
- 1.3 Search strategy in Reference and information Services.
- 1.4 Reference librarian: Role, Skills and Competencies.

Unit-II

- 2.1 Anticipatory Services
 - 4.1.1 Current Awareness service
 - 4.1.2 SDI
- 2.2 New & Emerging Techniques in CAS
- 2.3 Expert Systems in Reference & information Services.
- 2.4 Case Study of Different virtual Reference & Information Networks

Unit-III

- 3.1 Information Systems: Basic Concept, objectives and Functions.
- 3.2 Components of Information System
- 3.3 Historical Development of information systems.
- 3.4 Planning, Design and Evaluation of Information system.

Unit-IV

- 4.1 Study of International Information Systems and their programs
 - 4.1.1 INIS Features and Functions
 - 4.1.2 AGRIS Features and Functions
 - 4.1.3 MEDLARS/MEDLINE Features and Functions
- 4.2 Study of National Information Systems and their Programs

- 4.2.1 NISCAIR with reference to information services
- 4.2.2 INFLIBNET
- 4.2.3 DELNET
- 4.2.4 ENVIS

Suggested Readings

- Bell, Simon. (1996). *Learning with information systems: Learning Cycles in Information Systems Development*. London: Rutledge.
- Bopp, Richard. E., & Smith, Linda. (1974). *Reference and Information Services: An Introduction 3rd Ed.*. Colo: Libraries Unlimited.
- Davinson, Donald. (1980). *Reference Service*. London: Clive Bengely.
- Grogan, Dennis. (1992). *Practical Reference Work*. London: Library Association.
- Katz, Bill. (1991). *Reference and Information Services: A Reader for the Nineties*. Metuchen: Scarecrow Press.
- Katz, William. (1982). *Introduction to reference work: Basic information Sources. (4th Ed.) (3v)*. New York: McGraw Hill.
- Katz, William. A. (1978). *Introduction to reference work: Reference services And reference process*. New York: McGraw Hill.
- Khanna, J.K. (2000). *Documentation and Information Services, Systems and Techniques*. Agra: Y.K Publishers.
- Krishan Kumar. (1980). *Reference Services*. New Delhi: Vikas Publishing. Mukherji, A.K. (1975). *Reference Work and its Tools. (3rd Rev .Ed.)*. Calcutta: World
- Neelameghan A. and Prasad, K.N. Eds. (2005). *Information systems and services in India*. Bangalore: SRELS.

Websites (Illustrative):

INFLIBNET. (2007). Available at

<http://www.inflibnet.ac.in/>

DELNET. (2007). Available at

<http://delnet.nic.in/>

CALIBNET. (2007). Available at

<http://www.calibnet.in/>

NASCAIR. (2007). Available at

<http://www.niscair.res.in/>

FAO.(2007). Available at

<http://www.fao.org/Agris/>

LIS18304CR- Scholarly Communication and Publishing Ethics

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
2	2	0	4

Student learning outcome

- The paper will help students to draw a rich, nuanced picture of the practices and challenges involved in writing for scholarly publication. The content of the paper will be of greater help for taking a more inclusive approach to research.
- Students will be able to examine the historical developments and the changing trends in the field of academic writing, issues and challenges in scientific scholarly publishing and scientific data sharing, and new trends related to peer reviewing and measuring the impact of scientific publications.

Unit-I Academic Writing

- 1.1 Academic Writing: Purpose
- 1.2 Key Actors in Academic Writing
- 1.2 Academic Writing as Knowledge production

Unit-II Academic Writing Platforms and Publishing

- 2.1 Platforms and Types of Academic Writing
- 2.2 Academic Writing Obstacles
- 2.3 Publishing in Academic Journals

Unit-III Academic Review Process

- 3.1 Manuscript Evaluation and Editorial Evaluation
- 3.2 Review Process and Reviewer Qualities
- 3.3 Recommending Reviewers
 - 3.3.1 Types of Review

- 3.3.2 Editorial Feedback
- 3.3.3 Revisions and Submissions

Unit-IV *Research Ethics, Research Outreach and Performance*

- 4.1 Ethical guidelines for Publishing
- 4.2 Publishing Companies, Publishing Fees, and Open Access Journals
- 4.3 Increasing the research visibility

Suggested Readings

- Bailey, S. (2003). *Academic writing: A practical guide for students*. England: Nelson Thornes Ltd.
- De Silva, P. U. K. & Vance, C. K. (2017). *Scientific Scholarly Communication The Changing Landscape*. Switzerland : Springer.
- Ding, Y., Rousseau, R., & Wolfram, D. (Eds.). (2014). *Measuring Scholarly Impact: Methods and Practice*. Switzerland: Springer International Publishing.
- Englander, K. (2014). *Writing and Publishing Science Research Papers in English: A Global Perspective*. Netherlands: Springer.
- Greco, A. N. (2019). *The Growth of the Scholarly Publishing Industry in the U.S: A Business History of a Changing Marketplace, 1939–1946*. Cham, Switzerland : Palgrave Pivot.
- Habibie, P., & Hyland, K. (Eds.). (2019). *Novice Writers and Scholarly Publication: Authors, Mentors, Gatekeepers*. Cham, Switzerland: Palgrave Macmillan
- Herr, K., & Anderson, G. L. (2015). *The action research dissertation: A guide for students and faculty*. California : SAGE Publications.
- Lantsoght, Eva O.L. (2018). *The A-Z of the PhD Trajectory: A Practical Guide for a Successful Journey*. Switzerland: Springer International Publishing.
- Lewin, B. A. (2010). *Writing readable research: A guide for students of social science*. London: Equinox.
- RenckJalongo, M., & Saracho, O. N. (2016). *Writing for Publication: Transitions and Tools that Support Scholars' Success*. Switzerland: Springer International Publisher

LIS18305DCE - OPEN ACCESS ENVIRONMENT

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Students leaning outcome

After completion of this course, you will able to:

- Learn about scholarly communication process and various stages of research life cycle.
- Have know-how of concept, significance and genesis open access resources.
- Understand the concept of Creative common licenses and their different types with precise knowledge and implications.
- Learn about evolving open metrics and altmetrics to measure the scholarly output and their performance.

Unit-I ***Scholarly Communication Process***

- 1.1 Research Lifecycle
- 1.2 History and Evolution of Scholarly Communication
- 1.3 Status and Trends
- 1.4 Role of Stakeholders

Unit-II ***Open Access: History and Developments***

- 2.1 Open Access: Definition, Philosophy and Evolution
- 2.2 Approaches to Open Access
- 2.3 Benefits of Open Access

- 2.4 Arguments against Open Access and Responses
- 2.5 Open Access Business Models
- 2.6 Long-Terms Preservation Models

Unit-III Rights and Licenses

- 3.1 Intellectual Property Rights
- 3.2 Open Licenses
- 3.3 Support Tools and Services

Unit IV Advocacy for Open Access and Metrics

- 4.1 Open Access Advocacy
- 4.2 Training & Development
- 4.3 Open Access Metrics
- 4.4 Emerging Indicators (H-Index and Derivatives)

Suggested Readings

Abadal, E. (2012). Challenges for open access journals: quantity, quality and economic sustainability. Hipertext.net, 10. Retrieved from

<http://www.upf.edu/hipertextnet/en/numero-10/challenges-for-open-accessjournalsquantity-quality-and-economic-sustainability.html>.

Abel, R., Newlin, L. W., Strauch, K. P., & Strauch, B. (2002). Scholarly publishing: Books, journals, publishers, and libraries in the twentieth century. New York: Wiley.

Andersen, D. L. (2004). Digital scholarship in the tenure, promotion, and review process. Armonk, N.Y: M.E. Sharpe.

Björk, B-C et al. (2010). Open access to the scientific journal literature: situation 2009. PLoS ONE, 5(6). doi:10.1371/journal.pone.0011273

Borgman, C. L. (1990). Scholarly communication and bibliometrics. Newbury Park: Sage Publications.

Braxton, J. M. (1999). Perspectives on scholarly misconduct in the sciences. Columbus: Ohio State University Press.

Chan, Leslie. (n.d.). Exciting Potential of Scholarly Electronic Journals. CAUT.

- Davis-Kahl, S., & In Hensley, M. K. (2013). *Common ground at the nexus of information literacy and scholarly communication*.
- Gu, Feng & Widén-Wulff, Gunilla (2011). *Scholarly communication and possible changes in the context of social media: A Finnish case study*. *The Electronic Library*, 29(6), 762-776.
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<http://eprints.soton.ac.uk/265617/2/PG-chandos-harnad.pdf>
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- Loy, M. (2011). *Hindawi Publishing Corporation: Growing an Open-Access Contributor-Pays Business Model*. Updated 2011. London: Ithaka.
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- Suber, P. (2009). *Ten challenges for open-access journals*. *SPARC Open Access Newsletter*, 138. Retrieved from
<http://legacy.earlham.edu/~peters/fos/newsletter/10-02-09.htm>.
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<http://eprints.ecs.soton.ac.uk/17498/>
- Villarroya, A. et al. (2012). *Business models of publishers of scientific journals: Implications for Open Access*. *El profesional de la información*, 21(2), 129-135.
- Online Videos Tutorials*
- Flanders, Julia (2012). *Defining Scholarly Communication*. available at
<https://www.youtube.com/watch?v=8aybpzHLZuo>

Garfield, Eugene (n.d). Communicating science. available at

<http://www.webofstories.com/play/eugene.garfield/72>

Raff, Martin (n.d). Advice to Young Scientists: Do Important Science! available at

<http://www.webofstories.com/play/martin.raff/5>

University of Guelph (2014). Introduction to Scholarly Communication. available at

<https://www.youtube.com/watch?v=E9WcbnAOPVA>

LIS18306 DCE -AGRICULTURE INFORMATION SYSTEM
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course outcome:

- Students will deliver better agriculture libraries by offering appropriate information source and system
- Students will help the stakeholders to identify networks, programmes and resources most suitable for the field of agriculture.

Unit-I Agriculture Science and Organizations

- 1.1 Agricultural Science: Concept
- 1.2 Scope of agricultural sciences
- 1.3 Agricultural Science Organizations and Institutions. National and International. .
 - 1.3.1 Indian Council of Agricultural Research. (ICAR)
 - 1.3.2 Food and Agricultural Organization. (FAO).
- 1.4 Information needs and information seeking pattern of Agricultural Science Professionals: An overview.

Unit-II Agricultural Information Systems and Networks: International and National.

- 2.1 FAO Databases and Information Systems,
- 2.2 USDA Databases,
- 2.3 Consortium of International Agricultural Research Centers (CGIAR),
- 2.4 IARI and ICAR initiated databases.

Unit III National and international Library and Information support to Agricultural Sciences:

- 3.1 Contribution of National Agricultural library (USA), and National Digital Library for Agriculture (NDLA)
- 3.2 Library of IARI (India)
- 3.3 IDRC Digital Library (International Development Research Centre),

Unit-V *National and international agriculture databases*

- 4.1 AGRIS, AGRICOLA, CABI: Centre for Agriculture and Biosciences International, BIOSIS Previews, Biological & Agricultural Index plus, AGROVOC, Current Agricultural Research & Information System (CARIS)
- 4.2 Consortium for e-Resources in Agriculture (CeRA), AgriCat , Knowledge Innovation Repository of Agriculture in the North East
- 4.3 Microbial Genetic Resource Portal, National Academy of Agricultural Sciences, Rohu Database, Rice Knowledge Management Portal

Suggested Readings

Deshmukh.P.P (Ed) (1987).*Information systems for Agricultural sciences and Technology*.New Delhi, Metropolitan.

Eswara Reddy, D.B. (1976). *ICAR: History and Growth*. New Delhi: Indian Council of Agricultural Research.

John Shenod (1974). *Agricultural librarians Association In. Encyclopedia of Library and Information science*. (v12, p. 245) New York: M. Dekker

Leila. P. Morin (1976). *Agricultural sciences Information Network*. In *Encyclopedia of library and information science*. (V19, p. 42-43) New York: M. Dekker.

Phadins, S.P & Abu Shoaib Ahsan.(1976). Indian Agricultural data and Information .*Annals of library science and Documentation*, 23, pp.87-98.

Rajgopalan.T.S (1974). *Agricultural Librarianship In Encyclopedia of library and Information science* (V. 11, p-. 352)

Websites (Illustrative)

Aquaculture Network Information Center. Available at

www.aquanic.org

Commonwealth Agricultural Bureaux' World Agricultural Information Service. Available at

<http://www.cabi.org/>

Food and Agricultural Organization. Available at

www.fao.org.

Indian Agricultural Research Institute. Available at

<http://www.iari.res.in>

Japan International Research Center for Agricultural Sciences. Available at

<http://www.jircas.affrc.go.jp/>

National Agriculture and Forestry Research institute. Available at

<http://www.nafri.org.la/>

World Agricultural Information Centre. Available at

www.fao.org/WAICENT/

LIS18307DCE-WEB 2.0 & ADVANCED TECHNOLOGIES

4 Credit

Credit Pattern

Lecture	Tutorial	Practical	Total
3	0	1	4

Course outcome:

- The students will be familiar with the adoption and use of web 2.0 technologies in the library setup.
- The students will offer web 2.0 based library services and products to the broader user base.
- The students can implement web 2.0 services to help the research to enhance and benefit from the available sources, products and research networks in the web 2.0 environment.

Unit-I

- 1.1 Web 2.0: concept, development and features.
- 1.2 Web2.0 tools and technology: Blogs, Wikis, RSS feeds.
- 1.3 Social Networking: Podcasting, photo sharing, Mash-ups, General and professional SNS, video sharing sites

Unit-II

- 2.1 Web 2.0 and library: application and challenges
- 2.2 Managing scholarly communication in web 2.0 environment
- 2.3 Social networking services: trends, benefits and software for information professionals

Unit-III

- 3.1 Use of Cloud Computing: storage and collaboration
- 3.2 Create a mashup by adding a YouTube video and a Google map to a web page
- 3.3 Social book-marking, Folksonomies and User-Based Tagging

Unit-IV

- 4.1 Web 3.0 - the third decade
- 4.2 Web 3.0: features and application in libraries
- 4.3 Semantic web and linked data

Suggested Readings

Bradley, Phil. (2007). How to Use Web 2.0 in your Library. Facet Publication.

Ellyssa, Kroski. (2008). Web 2.0 for Librarians and Information Professionals. New York: Neil Schuman Publication

Theimer, Kate. (2010). Web 2.0 tools and Strategies for Archives and Local History collections. New York, Neil Schuman

Koorakki, Dinesh Vasudevam, T.M; ed. Library 2.0 and Information Management. Delhi, Atlantic Publication

Sauers, M.P. (2009). Searching 2.0. USA: Facet Publication.

Web 2.0 and Library 2.O: What Librarians Need to Know" by Elizabeth Black

LIS18308DCE- OPEN SOURCE TECHNOLOGY
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course Outcome

- The course is framed keeping in view the essence of building the theoretical foundation about Opensource software among the students in order to make them familiar about open source software and its use in different systems as a viable alternative to commercial software.

Unit-I Open Source: Basics

- 1.1 Open Source: Concept and Development.
- 1.2 Open Source Initiative
- 1.3 Open Source Licensing: An overview
- 1.4 Open Source: Issues and Challenges

Unit-II Open Source Software

- 2.1 Open Source Software: Definition and Characteristics.
- 2.2 Open Source Software in different Setups: An overview
- 2.3 Benefits of Open Source Software Technology

Unit-III Open Source Environments

- 3.1 Open Source Operating Systems: Ubuntu, and FreeBSD.
- 3.2 Apache OpenOffice, LibreOffice and NeoOffice
- 3.3 Open Source Database tools: MySQL, PostgreSQL and SQLite.

Unit-IV Open Source Software and Libraries

- 4.1 Open Source Software for Digital Libraries and Institutional Repositories.
- 4.2 Open Source Content Management Systems: An overview
- 4.3 Open Harvester Systems for Libraries.

Websites (Illustrative):

Apache OpenOffice (2017). Apache OpenOffice. Available at

<https://www.openoffice.org/>

Drupal (2017). Drupal. Available at

<https://www.drupal.org/>

FreeBSD (2017). FreeBSD. Available at

<https://www.freebsd.org/>

Joomla (2017). Joomla. Available at

<http://www.joomla.org/>

LibreOffice (2017). LibreOffice. Available at

<https://www.libreoffice.org/>

MySQL (2017). MySQL. Available at

<https://www.mysql.com/>

NeoOffice (2017). NeoOffice. Available at

<https://www.neooffice.org/neojava/en/index.php>

OpenCms (2017). OpenCms. Available at

<http://www.opencms.org/en/>

Open Harvester Systems (2017). Open Harvester Systems. Available at

<https://pkp.sfu.ca/ohs/>

Open Source Initiative (2017). Open Source Initiative. Available at

<http://opensource.org/>

PostgreSQL (2017). PostgreSQL. Available at

<http://www.postgresql.org/>

SQLite (2017). SQLite. Available at

<https://www.sqlite.org/>

Sourceforge (2017). Sourceforge. Available at

<http://sourceforge.net/>

Ubuntu (2017). Ubuntu. Available at

<http://www.ubuntu.com/>

LIS18003GE-WEB RESOURCES FOR RESEARCH

(2Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
01	01	0	02

Course outcomes

- After completion of this paper students will be able to know the various available web resources which will help them to carry forward their research and project work.

Unit-I Problem in Scientists Current Practices of Using Web-Based Information

- 1.1 Web information Sources: Concept and Need
- 1.2 Challenges to Harnessing Web-Based Information
 - 1.2.1 Information Overload and Resources Evaluation
 - 1.2.2 Web Site Navigation, Reliability and Browsability issues
 - 1.2.3 Preprints
 - 1.2.4 Financial Concerns
 - 1.2.5 Scholarly Misconduct and Misinformation
 - 1.2.6 Copyright issues
- 1.3 Controlled Vocabularies and Web Site Evaluation

Unit-II Tactics and Strategies for Dealing with Web-Based Information

- 2.1 Artificial Intelligence: Concept
- 2.2 Heuristic Search Strategies and Navigational Query Formulation
- 2.3 Search Strategies and Refinement Techniques in Online Databases
- 2.4 Information Sources - Subject Directories, e-Journals, e-Books, Databases and ETD's

Suggested Readings

- Hoggan, D. B. (2002). Challenges, strategies, and tools for research scientists: using Web-based information resources. *Electronic Journal of Academic and Special Librarianship*, 3(3).
- Korf, R. E. (1990). Real-time heuristic search. *Artificial intelligence*, 42(2-3), 189-211.
- Metzger, M. J. (2007). Making sense of credibility on the Web: Models for evaluating online information and recommendations for future research. *Journal of the Association for Information Science and Technology*, 58(13), 2078-2091.
- Pearl, J. (1984). *Heuristics: intelligent search strategies for computer problem solving*.
- Russell, S., Norvig, P., & Intelligence, A. (1995). A modern approach. *Artificial Intelligence*. Prentice-Hall, Englewood Cliffs, 25, 27.
- Schlachter, G. A., & Reference Service Press. (2002). *Scholarship search strategies*. El Dorado Hills, CA: Reference Service Press.
- Ter HOFSTEDDE, A. H., Proper, H. A., & van der Weide, T. P. (1996). *Query formulation as an information retrieval problem*. *The Computer Journal*, 39(4), 255-274.
- Libra Television. (2010). *Resources*. London: Teachers TV/UK Dept. of Education.

LIS18003OE-INFORMATION LITERACY: ADVANCED

(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
01	01	0	02

Course outcomes

- The paper will Acquaint the student with various literacy skills required for knowledge exploration, retrieval and dissemination.

Unit – I

- 1.1 Concept and importance of information literacy
- 1.2 Information sources: Concept, print and online
- 1.3 Documentary (Primary, Secondary and Tertiary) and Non-documentary: Specialists, Experts, Consultants; etc

Unit- II

- 2.1 Evaluation of information sources: Criteria
- 2.2 Information search strategies: Introduction and types
- 2.3 Formulation of search strategy
- 2.4 On-line searching.

Suggested Readings

- Plotnick, E., & ERIC Clearinghouse on Information & Technology. (1999). *Information literacy*. Syracuse, NY: Clearinghouse on Information & Technology.
- Grassian, E. S., & Kaplowitz, J. R. (2009). *Information literacy instruction: Theory and practice*. New York: Neal-Schuman Publishers.
- Godwin, P., & Parker, J. (2012). *Information literacy beyond Library 2.0*. London: Facet Pub.
- Films Media Group & Motion Masters Film & Video Production. (2016). *Introduction to Information Literacy*.

Katz, William. (1982). *Introduction to reference work: Basic information Sources.*(7thed.). (V. 3). New York: McGraw Hill.

Lancaster, F.W. (2003). *Indexing and Abstracting in Theory and practice (3rd ed.)*. London: Facet

Pub. Riedling, A. M. (2004). *Information literacy: What does it look like in the school library media center*. Westport, Conn: Libraries Unlimited.

Blanchett, H., Powis, C., & Webb, J. (2012). *A guide to teaching information literacy: 101 practical tips*. London: Facet Publishing.

Perdew, L., & Stebbins, L. F. (2017). *Information literacy in the digital age*.

The Association of College and Research Libraries. (2000). *Information Literacy Competency Standards for Higher Education*. Chicago.



4th Semester

Semester IV

4 th Semester	Course Code	Course Title	Paper Category	L	T	P	Credits
	LIS18401CR	Research Methods and Tools	Core	03	01	0	04
	LIS1802CR	Library Automation & Networking (Theory)	Core	03	01	0	04
	LIS18403CR	Library Automation & Networking (Practice)	Core	03	01	0	04
	LIS18404DCE	Project Report (Common paper for all the teachers and topics shall be as per the specialization of the teacher)	Discipline Centric Elective	03	01	0	04
	LIS18405DCE	Web resources for Research	Discipline Centric Elective	03	01	00	04
	LIS18004GE	Content Management	Generic Elective	01	01	0	02
	LIS18004OE	Open Educational Resources – benefits and impact	Open Elective	01	01	0	02

LIS18401CR-RESEARCH METHODS AND TOOLS

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course outcome:

➤ Since a clear understanding of research is of utmost importance for those who want to work

successfully in the research environments, the paper will provide a professional and practical exposure to the students about the fundamentals of research and prepare them for their future research endeavors. The paper will also explore the real benefits of research which will help the would-be researchers to grow as professionals for the expansion and enrichment of existing knowledge in their interested fields.

Unit-I

- 1.1 Research: Foundations, Need & Ethics with special reference to online ethics.
- 1.2 Research: Types and Steps.
- 1.3 Barriers in Research.

Unit-II

- 2.1 Research Design/Research Proposal: Structure and preparation of a model synopsis.
- 2.2 Hypothesis: formulation, types.
 - 2.2.1 Citation and Reference Styles with Special emphasis on APA Style.
 - 2.2.2 Online Citation and Reference Management Tools (Mendeley etc.)

Unit-III

- 3.1 Review of Literature (Tools and Techniques)
- 3.2 Research Methods:
 - 3.1.1 Historical: Definition, Characteristics and Stages
 - 3.1.2 Descriptive: Definition, Characteristics and Stages (Survey, Case Study etc)
 - 3.1.3 Experimental: Definition, Characteristics, Steps/Procedures,
 - 3.1.4 Spiral of Scientific Method

Unit-IV

- 4.1 Data Analysis Software and Applications: SPSS Overview
- 4.2 Research Report: Form, Structure and guidelines.
- 4.3 Research Communities: With Special Reference to Virtual Research Communities (VRC's)

Suggested Readings

- Arora, P.N., & Arora, S. (2000). *C A Foundation course statistics*. (4thRev.ed.) New Delhi: S.Chand.
- Allan, B. (2010). *Supporting Research Students*. London: Facet
- Baker, L. (2006). *Research methods*. U.S.A: John Hopkins University Press.

- Barry, C.A. (1997). *Information Skills for an Electronic World: Training Doctoral Research Students. Journal of Information Science*, 23 (3), 225-238.
- Busha, C.H., & Harter, S. H. (1988). *Research Methods in librarianship: techniques and interpretation*. New York: Academic Press.
- Chiang, K.H. (2003). Learning experiences of doctoral students in U.K Universities. *International Journal of Sociology and Social Policy*, 23 (1/2), 4-32.
- Croxtan, F. E. (1969). *Applied general statistics*. (3rded). New Delhi: Prentice Hall.
- Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of qualitative research*. Thousand Oaks: Sage Publications.
- Elhance, D.N. (2005). *Fundamentals of statistics*. Allhabad: Kitab Mahal.
- Frankfort, C., & Nachmias, D. (1999). *Research methods in social sciences*. (6thed. New York: Worth Publishers.
- Goode, W. J., & Hatt, P .K. (1952). *Methods in social research*. New York, McGraw-Hill.
- Gosh, B.N. (1984). *Scientific method and social research* (2nded.).Delhi: Sterling.
- Goswami, P. R. (1996). *Statistical information system and libraries*. New Delhi: Anmol Pub.
- Gupta, S.C., & Kapoor, V.K. (2001). *Fundamentals of mathematical statistics*. New Delhi: Sultan Chand. James, T. Mc. C. (2005). *First course in statistics*. (9thed.). New Delhi: Prentice Hall.
- Khanna, J.K. (1997). *Library Compendium*. New Delhi: Beacon Books.
- Kumar, K. (1999). *Research Methods in Library and Information Science*. (2nd Rev. ed.). New Delhi: Har- Anand Publications.
- Powell, R. R., & Connaway, L. S. (2004). *Basic research methods for librarians*. West Port, Conn : Libraries Unlimited
- Sharma, R. D. (1988). *Research methods in social sciences*. New Delhi: National Book Organization.
- Sharma, P. S. K. (1996). *Librarian's knowledge of knowledge (including research methodology)*. New Delhi: Ess Ess.
- Simpson, I.S. (1988). *Basic statistics for librarians*. (3rd Rev ed.). U.K: Library Association.
- Singh, S.P. (2002). *Research methods in social sciences: a manual for designing questionnaire*. New Delhi: Kanishka Publishers.
- Somekh, B., & Lewin, C. (2005). *Research methods in the social sciences*. London: Sage Publications.
- Sproull, N .L. (1988). *Handbook of research methods: a guide for practioners and students in social sciences*. Metuchen, N.J: Scarecrow Press.
- Trochim, W. M.K. (2003). *Research Methods* (2nd ed.). New Delhi: Biztantra

LIS18402CR-LIBRARY AUTOMATION AND NETWORKING

(Theory)

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Course outcome:

- A chaotic and rapidly changing world of technology is dominating every sphere of knowledge and libraries have also embraced this changing technology to their fullest. The paper will guide the budding library professionals about the emerging technologies which will in turn guide them to practically get familiar with the technological gimmicks to prove themselves as the information professionals of the present technological era.

Unit-I

- 1.1 Library Automation: Origin and Development
- 1.2 Library Automation: Need and Purpose
- 1.3 Planning and Implementation of Library Automation
- 1.4 Library Automation: Operations

Unit-II

- 2.1 Communication: An Overview
- 2.2 Networks: Concept and Components
 - 2.2.1 Classification and Topology
 - 2.2.4 Resource Sharing and LIS Networks
- 2.3 Classification of LIS Networks based on Services offered

Unit-III

- 3.1 Internet: Origin and Development; Features and Working
- 3.2 World Wide Web: Origin and Development
 - 3.3.1 Features; Working and Use
 - 3.3.2 Information Search Tools
- 3.3 Invisible Web: Brief Concept and Tools
- 3.4 World Wide Web and Information Resources
 - 3.4.1 Online Journals

- 3.4.2 Online Books
- 3.4.3 Electronic Theses and Dissertation (ETDs)
- 3.4.4 Online Newspapers, etc.
- 3.5.5 *Open access Resources*

Unit-IV

- 4.1 Digital Libraries: Origin and Development and Features
- 4.2 Digital Libraries: Issues and Challenges
- 4.3 Digital Preservation: Concept and importance
- 4.4 Metadata
 - 4.4.1 Metadata: Historical Development and Concept
 - 4.4.2 Types of Metadata (Three and Five Category Taxonomy)
 - 4.4.3 Metadata Element Sets: Dublin Core etc.

Suggested Readings

- Ackermann, E. C., & Hartman, K. (2013). *Searching & researching on the internet & the world wide web*. New York: Routledge.
- Ackermann, E., & Hartman, K. (2014). *Information Specialist's Guide to Searching and Researching on the Internet and the World Wide Web*. Florence: Taylor and Francis.
- Antleman, K. (2004). Do open access articles have a greater research impact? *College and research libraries*, 65(5), 372-82. Available at:
<http://eprints.rclis.org/archive/00002309/>
- Arms, W. Y. (2015). *Digital Libraries*. Cambridge: MIT Press
- Baca, M., & Getty Research Institute. (2008). *Introduction to metadata*. Los Angeles, CA: Getty Research Institute.
- Bush, V. (1945). As we may think. *Atlantic Monthly*, 176, pp.101-108. Available at:
<http://www.theatlantic.com/unbound/flashbks/computer/bushf.htm>
- Caplan, P. (2003). *Metadata fundamentals for all librarians*. Chicago: American Library Association.
- Deaenley, J., & Feather, J. (2001). *The wired world: An introduction to the theory and practice of the information society*. London: Library Association. D-Lib Magazine. (2019 - till date). Available at:

<http://www.dlib.org>

Duval, B.K. & Main, L. (1992). *Automated library systems*. Westport, Connecticut: Meckler
Description of Dublin Core (2007). Available at:

<http://dublincore.org/>

Earnshaw, R. E., & Vince, J. A. (2001). *Digital content creation*. U.S.A: Springer.

Foulonneau, M., & Riley, J. (2008). *Metadata for digital resources: Implementation, systems design and interoperability*. Oxford: Chandos.

Gillies, J., & Cailliau, R. (2007). *How the web was born: The story of the world wide web*. Oxford: Oxford University Press.

Glossbrenner, A., & Glossbrenner, E. (2001). *Search Engines for the World Wide Web*. U.S.A:

Peachpit. Haynes, D. (2004). *Metadata for information management and retrieval*. London: Facet

Hartman, K., Ackermann, E. C., & Hartman, K. (2010). *Searching & researching on the Internet and the World Wide Web*. Sherwood, OR: Franklin, Beedle & Associates.

Hockx-Yu, H. (2006). Digital preservation in the context of institutional repositories. *Program electronic library and information systems*, 40 (3),232-243.

Jacobs, N. (Ed.). (2006). *Open access: Key strategic, technical and economic aspects*. England: Chandos. Jones, R., Andrew, T., & Mac Coll, J. (2006). *The institutional repository*. England: Chandos.

Joudrey, D. N., Taylor, A. G., & Wisser, K. M. (2018). *The organization of information*. London: Libraries Unlimited

Kochar. R.S., & Sudarshan, K.N. (1997). *Library Automation: issues and systems*. New Delhi: APH Pub.

Kochtanek, T. R. & Matthews, J. R. (2002). *Library information systems*. Westport, Connecticut: Libraries Unlimited.

Lancaster, F. W. (1993). *Libraries and the Future: Essays on the Library in the Twenty-first Century*. U.S.A: Haworth.

Lazinger, S. S. (2001). *Digital preservation and metadata*. Englewood: Greenwood.

Ma, J., & Association of Research Libraries. (2007). *Metadata*. Washington, D.C: Association of Research Libraries.

Maggie, J. (2004). The digital preservation coalition. *VINE: The Journal of Information and Knowledge Management Systems*, 34,(2),84-86.

Miller, S. J. (2011). *Metadata for digital collections: A how-to-do-it manual*. New York: Neal-Schuman Publishers.

- Norton, P. (2010). *Introduction to computers*. New Delhi: Tata McGraw Hill.
- Pariser, E. (2011). *The filter bubble: What the Internet is hiding from you*. New York: Penguin Press.
- Pomerantz, J., & MIT Press. (2015). *Metadata*. Cambridge, Massachusetts: The MIT Press.
- Malavya, V. (1999). *Library Automation*. New Delhi: Common Wealth Pub.
- Minoli, D. (2001). *Internet and intranet engineering: Technologies, protocols and applications*.
New Delhi: Tata McGraw-Hill.
- O' Regan, G. (2019). *Innovation in computing companion: A compendium of select, pivotal inventions*. Switzerland AG: Springer.
- Ravenwood, C., Matthews, G., & Muir, A. (2013). Selection of digital material for preservation in libraries. *Journal of Librarianship and Information Science*, 45 (4), 294–308. DOI: 10.1177/0961000612452030
- Seadle, M. (2004). Selection for digital preservation. *Library Hi Tech*, 22 (2), 119-121. DOI: 10.1108/07378830410543494
- Servin, C. (1996). *Telecommunications: Transmission and network architecture*. London: Springer.
- Strauss, H. (2007). The future of the web, intelligent devices, and education. *Educase Review*, 42(1), 32- 47. Available at:
<http://www.educause.edu/apps/er/erm07/erm0711.asp>
- Suber, P., & MIT Press. (2012). *Open access*. Cambridge: The MIT Press.
- Taylor, A. G. (2003). *The organization of information*. London: Libraries Unlimited
- Vishwanathan, T. (1992). *Telecommunications switching systems and networks*. New Delhi: Prentice Hall.
- Williams, B. K. & Sawyer, S. C. (2003). *Using information technology* (5th ed.). New York: McGraw-Hill/Irwin.
- Zeng, M.L., & Qin, J. (2016). *Metadata*. London: Facet.

LIS18403CR- LIBRARY AUTOMATION AND NETWORKING

(PRACTICE)

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
0	0	4	4

Course outcome

- The practical course is designed to provide hands on sessions for creating mini test beds using packages like VB for database management and digital library software. Besides there are sessions for creating web pages using HTML and other tools and practical demonstration for using simple and advanced search techniques across different search tools available on the web that will help to:
- Operate and manage automated library systems.
- Create, manage and update personal and institutional blogs.
- Formulate effective search strategy to retrieve precise information from different types of electronic search platforms.

Unit-I

Practical 1.1 Creating New Projects using Standard EXE.

Practical 1.2 Working with VB Components like Labels, Frames.

Practical 1.3 Radio Buttons, Scrolls, and List Boxes etc.

Practical 1.4 Database connectivity Using ADODB Control.

Practical 1.5 Data Insertion /Retrieval/Updation. (Project).

Unit-II

Practical 2.1 Library Management Software: Acquisition Module, Catalogue Module.

Practical 2.2 Library Management Software: Circulation Module, OPAC Module and Serial Control Module.

Practical 2.3 Greenstone: Installation and Customization.

Practical 2.4 Greenstone: Collection Building, Metadata induction (project).

Practical 2.5 Greenstone: Plugins, Searching-Indexes, Browsing-classifiers and working with ISIS files.

Unit III

- Practical 3.1 Syntax of HTML Document. Create a new HTML document.
- Practical 3.2 Formatting of HTML Document. Format text (font size, color, etc.) in HTML presentation. Creating internal and external links.
- Practical 3.3 Creating lists using bullets or numbers.
- Practical 3.4 Creating Tables and organizing information.
- Practical 3.5 Background color and images.
- Practical 3.6 Introduction of FrontPage and publisher for web publishing
- Practical 3.7 Creation of a website and publishing on free web services (project)

Unit IV

- Practical 4.1 Web Searching: Simple and Advanced using various search techniques.
- Practical 4.2 Searching tools and their usage: Search Engines, Meta Search Engines, Subject Gateways; etc.
- Practical 4.3 Searching Web Resources using Digital Libraries, E-repositories and E-Archives.
- Practical 4.4 Introduction to various emerging webservices. (Like Blogs, RSS feed, U-tube, wikis etc.)
- Practical4.5 Creation of Blog and /or Wiki (Project).

Suggested Readings

- Bradley, P. (2007). *How to use web 2.0 in your Library*. London: Facet Pub.
- Booth, C., Mates, B. T., Guder, C. S., Junus, S. G. R., Riley-Huff, D. A., Tatomir, J., & Tatomir, J. (2012). *Making libraries accessible: Adaptive design and assistive technology*. Chicago, IL: ALA Tech Source.
- Cooke, A. (1999). *A guide to finding quality information on the internet: Selection and evaluation strategies*, London: LA.
- Crumlish, C., & Malone, E. (2009). *Designing social interfaces*. Beijing: O'Reilly Media. Devlin, I. (2012). *HTML5 multimedia: Develop and design*. Berkeley, Calif: Peachpit Press.
- Glossbrener, A., & Glossbrener, E. (1998). *Search Engines for World Wide Web*.
- Halvorson, M. (2003) *Microsoft Visual Basic 6.0 Professional step by step (2nd ed)*. Redmond, Wash: Microsoft.

- Hartman, K., & Ackermann, E, C. (2005). *Searching & researching on the internet & the world wide web*. Wilsonville: Franklin Beedle.
- Holzner S. (2003). *Visual Basic 6 Programming*. New Delhi: Dreamtech.
- Holzner, S.(2000). *HTML black book*. Scottsdale, AZ: Coriolis.
- Holzner, S.(2006). *New Visual Basic 2005 black book*. Scottsdale, Ariz: Paraglyph.
- HTML complete*. (2003). San Francisco: Sybex.
- Jamsa, K.A. (2002). *HTML and web design: tips and techniques*. New York: McGraw Hill.
- Kerman, M, C., &Brown R. L.(2000).*Computer programming fundamentals with applications in Visual Basic 6.0*. Reading Mass: Addison-Wesley.
- Lane, J. (2012). *Foundation Website creation with HTML5, CSS3, and JavaScript*. Berkeley, Calif.: friends of ED.
- Li, Ze-Nian., & Drew, Marc S.(2004). *Fundamentals of Multimedia*. NJ: Prentice Hall Pub.
- Library and Information Technology Association (U.S.). (2002). *Open source software for libraries: An open source for libraries collaboration*. Chicago: LITA.
- Lloyd, I. (2011). *Build your own website the right way using HTML & CSS*. Collingwood, Australia: Sitepoint.
- Lopuck, L. (2012). *Web design for dummies*. Indianapolis, IN: John Wiley & Sons.
- MacDonald, M. (2011). *Creating a website*. Beijing: O'Reilly.
- McCormick, J. A.(1990).*A guide of optical storage technology: using CD-ROM, WORM, erasable, digital paper, and other high density opto-magnetic storage devices*. Homewood, III: Dow Jones-Irwin Professional
- McCormick, J. A.(1994).*The new optical technology: including multimedia, CD-ROM and optical drives*. Burr Ridge, III: Irwin Professional
- Meloni, J. C. (2012). *Sams teach yourself HTML, CSS, and JavaScript all in one*. Indianapolis, Ind: Sams Pub.
- Mitchell, S. (2009). *Create your own website*. Indianapolis, Ind: Sams.
- Ogunjobi, T. (2013). *Drupal web profiles*. Boca raton, fl: Crc press.
- Osborn, J., Smith, J., AGI Training Team.,& AGI Creative Team. (2011). *Web design with HTML and CSS: Digital classroom*. Indianapolis, IN: Wiley Pub.
- Page, R. (2012). *Website optimization: An hour a day*. Hoboken, NJ: John Wiley & Sons.
- Pence, J.H. (2001). *How to do everything with HTML*. New York: McGraw Hill. Perry, R. L. (2000). *Build your own Website*. New York: Franklin Watts.
- Poulter. A, Tseng. G., & Sargen, G. (1997). *The library and information professionals guide to the www.London.LA*.

- Raatma, L. (2010). *Blogs. Ann Arbor, Mich: Cherry Lake Pub.*
- Richardson, W. (2006). *Blogs, wikis, podcasts, and other powerful web tools for classrooms.* Thousand Oaks, Calif: Corwin Press.
- Sauers, Micheal P., &Adkins, Denice.(2001).*Using the internet as a tool: a how to do it manual for librarians.* New York: Neal-Schuman Pub.
- Seo, K. K.-J. (2012). *Using social media effectively in the classroom: Blogs, wikis, twitter, and more.* New York, NY: Routledge.
- Terry, R., & Banerjee, K (2008). *Building Digital Libraries.* New york: Neal-Schuman
- Vats, L. (2001).*Web designing with HTML, Java Script an introduction.* Delhi: Cyber Tech Pub.
- West, M. (2013). *HTML5 foundations.* Chichester, West Sussex, U.K: John Wiley & Sons.
- Witten, I. H., Bainbridge, D., & Nichols, D. M. (2010). *How to build a digital library.* Burlington, MA: Morgan Kaufmann Publishers.
- Worsley, T. (2000). *Building a website.* New York: DK Pub.
- Zak, D.(2001).*Programming with Microsoft Visual Basic 6.0.*Cambridge, Mass: Course Technology.
- Zak, D.(2007). *Microsoft Visual Basic 2005: reloaded (2nd ed)* US: Thomson Course Technology.
- Zee, N. (2003). *HTML & Web artistry 2: More than code (2nd ed).*Indian o Polis, IN: New Riders Pub.

Websites (Illustrative):

University of Waikato. (2017). About Greenstone. Available at:

<http://www.greenstone.org/>

University of Waikato. (2017). *Greenstone Wiki.* Available at:

<http://www.greenstone.org/wiki/index.php/GreenstoneWiki/>

LIS18404DCE-PROJECT REPORT

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
0	1	3	4

Course outcomes:

- This will prove useful to the student in applying knowledge and experience acquired during the academic session to real, live and emerging problems in the field.

Method of Instruction

Each student or a group of two students only (depending upon the scope of the problem) will be required to submit a project report on an approved topic of current research and application. The report is to be submitted both in hard and soft format. The student(s) will work under the supervision of one or two experts/ guides from the Department or any other department of the university/ other recognized research institutes for successful completion of the project. The areas and topic will be finalized and approved by the Departmental research cum ethics committee to be constituted for the purpose, comprising Head of the Department, two senior colleagues and two approved supervisors on rotation basis.

Each report will be evaluated by the external and internal examiner and marks/grades for evaluation will be on presentation, methodology and inputs put in the work. The viva voce will also be conducted by the committee comprising HOD, External Examiner and two senior faculty members.

The Project will be of 100 marks out of which 80 marks will be awarded to project report evaluation and 20 marks will be for viva voce by the said committee. There will be no internal assessment. The Project Report is to be submitted not beyond 2 months after completion of 4th semester examination.

Suggested Readings:

“The guide will provide the suitable list of readings and resources relevant to the problem”.

Other Suggested Readings:

American Psychological Association. (2007). APA style. Available at

<http://apastyle.apa.org/>

- Anderson, William Ewart. (1947). *Thesis writing, a guide for the preparation of the master's thesis*. Montgomery, Ala., Paragon Press.
- Baker, Lynda. (2006). *Research methods*. U.S.A: John Hopkins University Press.
- Busha, Charles.H. & Harter, Stephen, H. (1988). *Research Methods in librarianship: techniques and interpretation*. New York: Academic Press.
- Krishan Kumar. (1999). *Research Methods in Library and Information Science*. (2nd Rev. ed.). New Delhi: Har-Anand Publications.
- Morrow, Paul Reed.(1932). *A guide to thesis writing*. Athens, Ga. McGregor Company.
- Newsom, Nathan William (1898). *Standards for thesis writing*. Scranton, Pa, International textbook.
- Powell, Ronald. R., & Connaway, Lynn. Silipigni.(2004). *Basic research methods for librarians*. West Port, Conn : Libraries Unlimited
- Singh, S.P. (2002). *Research methods in social sciences: a manual for designing questionnaire*. New Delhi: Kanishka Publishers.
- Trochim, William. M.K.(2003). *Research Methods (2nded.)*. New Delhi: Biztantra.

*Note: The reading list is not exhaustive. The main reading list will vary from problem to problem and will be developed by the scholar and concerned Supervisor jointly for fruitful completion

LIS18405DCE-WEB RESOURCES FOR RESEARCH

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
03	0	01	04

Course outcomes:

- After completion of this paper students will be able to know the various available web resources which will help them to carry forward their research and project work.
- Students will be acquainted with Tactics and Strategies for dealing with such sources
- Students will be acquainted with sources and tools dealing with web based information

Unit-I *Problem in Scientists Current Practices of Using Web-Based Information*

- 1.1 Web information Sources: Concept and Need
- 1.2 Challenge to Harnessing Web-Based Information
 - 1.2.1 Information Overload and Resources Evaluation
 - 1.2.2 Web Site Navigation, Reliability and Browsability issues
 - 1.2.3 Preprints
 - 1.2.4 Financial Concerns
 - 1.2.5 Scholarly Misconduct and Misinformation
 - 1.2.6 Copyright issues

Unit-II *Tactics and Strategies for Dealing with Web-Based Information*

- 2.1 Artificial Intelligence: Concept and Importance
- 2.2 Heuristic Search Strategies and Navigational Query Formulation
- 2.3 Controlled Vocabularies and Web Site Evaluation
- 2.4 Search Strategies and Refinement Techniques in Online Databases

Unit-III *Sources and tools for Dealing with Web-Based Information*

- 3.1 Subscribed Sources -Subject Directories, e-Journals, e-Books, Databases and ETD's.
- 3.2 Free Information Sources
- 3.3 Preprint Servers

Unit-IV

- 4.1 Identifying Web Resources (URL, URI, PURL, etc.)
- 4.2 Digital Object Identifier: Concept and Features
- 4.3 Digital Signatures and Digital Humanities
- 4.4 Emerging Technologies: Web 3.0, etc.

Suggested Readings:

- Hoggan, D. B. (2002). *Challenges, strategies, and tools for research scientists: using Web-based information resources. Electronic Journal of Academic and Special Librarianship, 3(3).*
- Korf, R. E. (1990). *Real-time heuristic search. Artificial intelligence, 42(2-3), 189-211.*
- Metzger, M. J. (2007). *Making sense of credibility on the Web: Models for evaluating online information and recommendations for future research. Journal of the Association for Information Science and Technology, 58(13), 2078-2091.*
- Pearl, J. (1984). *Heuristics: intelligent search strategies for computer problem solving.*
- Russell, S., Norvig, P., & Intelligence, A. (1995). *A modern approach. Artificial Intelligence. Prentice-Hall, Englewood Cliffs, 25, 27.*
- Schlachter, G. A., & Reference Service Press. (2002). *Scholarship search strategies. El Dorado Hills, CA: Reference Service Press.*
- HOFSTEDÉ, A. H., Proper, H. A., & van der Weide, T. P. (1996). *Query formulation as an information retrieval problem. The Computer Journal, 39(4), 255-274.*
- Libra Television. (2010). *Resources. London: Teachers TV/UK Dept. of Education.*

LIS18004GE- Content Management (2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

Course Outcome

- The course helps to develop better understanding of key concepts in content management with a focus on developing skills to enhance the visibility of multimedia content using open source content management tools.
- This course is focused on various aspects of Content Management and develop skills for building and managing Digital Collections. Using different Content Management Systems

Unit-I Content Management Systems: Basics

- 1.1 Content Management: Concept and Importance
- 1.2 Understanding Key concepts in Content Management: Portal, Container, Module, Content, Role, User, Permissions etc.
- 1.3 Prominent Content Management Systems: Features and functionalities

Unit-II Content Management: Process and Evaluation

- 2.1 Steps in Content Management: Content Creation, Processes, Metadata, Platforms/Environment, Quality, Implementation.
- 2.2 Content Management tools: Web Browsers, Image editors, text editors, web based video tools, and web based presentation tools.
- 2.3 Evaluation of Prominent Content Management Systems in different setups.

Suggested Reading

Addey, D. (2002). *Content management systems*. Birmingham: Glasshaus.

Arthur, M. H. (2006). *Expanding a digital content management system: For the growing digital media enterprise*. Amsterdam: Elsevier Focal Press.

Bergen, J. (2008). *Content management*. Amsterdam: StichtingArchis. Boiko, B. (2005). *Content*

management bible. Indianapolis, IN: Wiley Pub. Cole, J. R. (2008). Using Moodle. Farnham: O'Reilly.

Derr, M., & Symes, T. (2009). *Joomla!*. Berkeley, CA: Peachpit Press.

Eden, B. L. (2008). *Content management systems in libraries: Case studies*. Lanham, Md: Scarecrow Press.

Foulonneau, M., & Riley, J. (2008). *Metadata for digital resources: Implementation, systems design and interoperability*. Oxford: Chandos Pub.

Haynes, D (2004). *Metadata for Information Management and Retrieval*. London: Facet Pub.

Mitchell, S. (2009). *Create your own website*. Indianapolis, Ind: Sams.

Myrick, J. (2010). *Moodle 1.9 testing and assessment: Develop and evaluate quizzes and tests using Moodle modules*. Birmingham, U.K: Packt Pub.

Ogunjobi, T. (2013). *Drupal web profiles*. Boca raton, fl: Crc press.

Papy, F. (2008). *Digital libraries*. London, UK: ISTE Ltd.

Shreves, R. (2010). *Joomla! bible*. Indianapolis, IN: Wiley Pub.

White, M. S. (2005). *The content management handbook*. Abingdon: Facet Pub.

Websites(Illustrative):

Drupal (2017). Drupal. Available at
<https://www.drupal.org/>

Joomla (2017). Joomla. Available at
<http://www.joomla.org/>

Moodle (2017). Moodle. Available at
<https://moodle.org/>

OpenCms (2017). OpenCms. Available at
<http://www.opencms.org/en/>

LIS18004OE-OPEN EDUCATIONAL RESOURCES: BENEFITS AND IMPACT

(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

Course outcome

- The course helps to develop better understanding of selecting, creating and using Open educational resources for supporting interactive learning experiences.
- This course focuses on various aspects of Open Education and develop skills for using, modifying, repurposing and redistributing Open Educational Resources for enriching life-long learning

Unit-I Open Education and Open Educational Resources (OER)

- 1.1 Open Education: Concept and Importance.
- 1.2 Open Educational Resources (OER): Concept, Genesis and Development.
- 1.3 Open Licenses: An overview
- 1.4 Open Educational Resources: Challenges and Issues

Unit-II Open Educational Resources: Use and Impact.

- 2.1 OER initiatives at Global level: An overview
- 2.2 Open Educational Resources: Asian Perspective
- 2.3 Quality Assurance in OERs.
- 2.4 OER repository Software: Features and Utilities.

Suggested Readings

Achal Prabhala. (2010). *Copyright and Open Educational Resources*.

Baker, Judy. (2005). *Introduction to Open Educational Resources*.

Catherine Casserly, & Marshall Smith. (2006). *The Promise of Open Educational Resources*. Commonwealth of Learning (COL), United Nations Educational, Scientific and Cultural Organization (UNESCO).

Kanwar, Asha, Uvalić- Trumbić, Stamenka, & Butcher, Neil. (2011). *A basic guide to open educational resources (OER)*. Vancouver: Commonwealth of Learning; Paris: UNESCO. Available at

<http://www.col.org/PublicationDocuments/Basic-Guide-To-OER.pdf>

Susan D'Antoni. (2008). *Open Educational Resources: The Way Forward*.

McGreal, Rory, & Anderson, Terry. (n.d.). *Open Educational Resources*.

Schaffert, S. & Geser, G. (2008). *Open Educational Resources and Practices*. *eLearning Papers*, (7). Retrieved from:

<http://learn.creativecommons.org/wp-content/uploads/2008/05/open-educational-resources-and-practices.pdf>

UNESCO. (2009). *Open Educational Resources: Conversations in Cyberspace*. Retrieved from:

<http://libros.metabiblioteca.org/bitstream/001/302/8/978-92-3-104085-6.pdf>

UNESCO (2011). *Guidelines for open educational resources (OER) in higher education*. Available at

<http://unesdoc.unesco.org/images/0021/002136/213605e.pdf>