

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 1<sup>st</sup>

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 Theory and Practice	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*

<b>Lecture</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Total</b>
<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>

*Objectives*

- To acquaint students with the library as a social institution for knowledge generation, creation and dissemination
- To make understanding of the philosophical and social foundations of Library and information centers.

*Student learning 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.

**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.
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- 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.
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- Martin, William J. (1995). *The Global Information Society*. (2<sup>nd</sup>.rev.ed.) London: ASLIB
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- Prasad, K. N. Intellectual property Rights.(1998). In Neelameghan, A. & Prasad, K. N (Eds.), *Information systems, Networks and Services in India*, Bangalore: Ranganathancentre for Information Studies
- Ranganathan, S. R. (1931) *Five Laws of Library Science*. Madras: Madras Library Association.
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- 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

*Objectives:*

- To understand the formation and expansion of universe of knowledge with a need to understand its organization.
- To be acquainted with major schemes of classification and develop skills in subject analysis and synthesis.
- To develop proficiency in using Dewey Decimal Classification to construct Class Numbers for documents of different disciplines / subjects.

*Student Learning 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.

**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

#### **References**

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- 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>

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

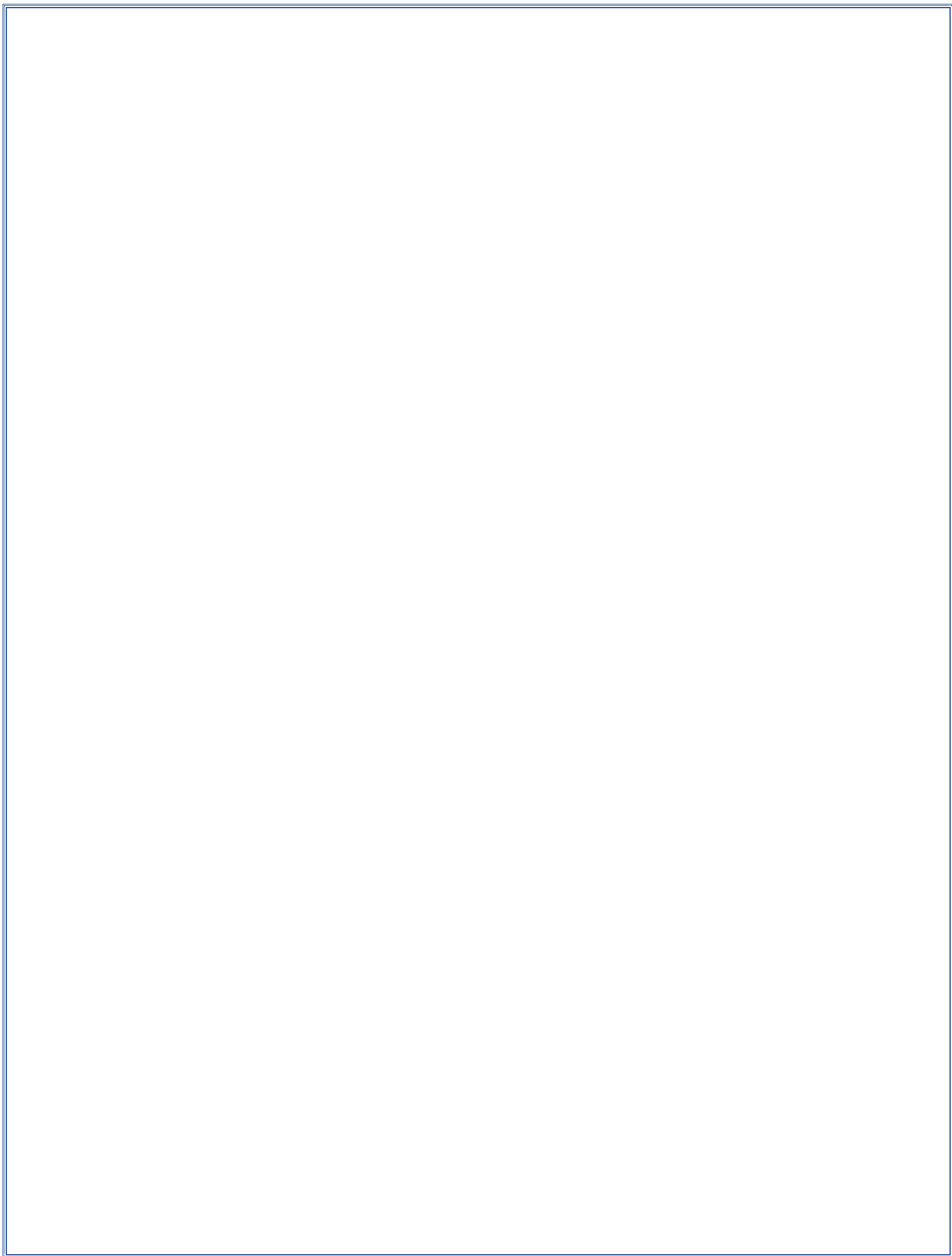
Sharma, Panday. S.K. (1990). *Universe of knowledge and Research Methodology*. Delhi: Kent pub

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

**Websites (Illustrative):**

OCLC. (2012). *Dewey Decimal Classification*. 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

### *Objectives*

- To acquaint with essential routines and operations performed in various types of libraries for providing effective services.

### *Student Learning Outcome*

- The course will provide an indepth knowledge about various library operations for better understanding the technicalities involved in successful collection development and management in modern libraries.

#### ***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,

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Evans, G. E., Intner, S. S., & Weihs, J. R. (2011). *Introduction to technical services*. Santa Barbara, Calif. [u.a.: Libraries Unlimited.

Fenner, A. (2004). *Selecting materials for library collections*. Binghamton, NY: Haworth Information Press.

Fowler, D. C. (2004). *E-series 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.

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- 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
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- 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

### *Objectives*

- To foster the development of professional knowledge to successful public librarianship
- To educate and train about range of professional challenges associated with public library administration and management

### *Student learning 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.
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Simpson, M. S., & Duwel, L. I. (2007). *Bringing classes into the public library: A handbook for librarians*. Jefferson, N.C: McFarland & Co.

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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>

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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 SYSTEM

(4 credits)

*Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

**Objectives**

- To provide an overview of principles and practices in school library systems.
- To understand the challenging roles of school libraries and media specialists.

***Student learning 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.

***U***

***n***

i/1.1 School Library System: Basic Concept.

***t***

/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

2.1 Role of School libraries in promoting and supporting Education.

2.2 Role of School Librarian.

**Unit II**

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*

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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.

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- Thanuskodi, S. (2013). *Challenges of academic library management in developing countries*. Hershey PA: Information Science Reference.
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LIS18106DCE-ORIENTAL LIBRARY SYSTEM  
(4 Credits)

*Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

**Objectives**

- To understand development, emergence and collection of Oriental Libraries.
- To recognize various strategies for organization and preservation of the oriental collection.
- To understand the importance of digitization and digital preservation for the cultural treasure.

*Students learning 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

*UnitII*

- 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

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***Cambridge University Library Available at***

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***Indira Gandhi National Centre for the Arts , Available at***

***[www.ignca.nic.in/](http://www.ignca.nic.in/)***

***KhudaBakhsh Oriental Public Library , Available at [kblibrary.bih.nic.in/](http://kblibrary.bih.nic.in/)***

***Rampur Raza Library , Available at***

***[razalibrary.gov.in/](http://razalibrary.gov.in/)***

***Royal Asiatic Society London, Available at***

***[www.royaliasiaticsociety.org/](http://www.royaliasiaticsociety.org/)***

***The British Library - The world's knowledge, Available at [www.bl.uk](http://www.bl.uk)***

## LIS18107DCE-HEALTH INFORMATION SYSTEM: INTRODUCTION TO HISTORY AND POLICIES

*(4 Credits)*

### *Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

### **Objective**

- To understand the working procedures and policies of Health Information Systems

### *Student learning outcomes*

- Students will be able to formulate some new ways and means in order to cater the information needs of the health professionals

### 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.

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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:**

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LIS18108DCE-INFORMATION TECHNOLOGY - THEORY

*(4 credits)*

*Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

**Objective**

- To familiarize with the basic concepts and components of Information technology, software tools and database management systems useful for information management.

*Student Learning 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.

*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:*

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**Fehily, C. (2005). *Windows XP*. Berkeley, Calif: Peachpit.**

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

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Leon, A & Leon M. (1999). *Fundamentals of information technology*. Chennai:LeonVikas Pub

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- Schwarz, M. (2002). *Multitool Linux: Practical uses for open source software*. Boston: Addison-Wesley.
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- Shelly, G. B., Cashman, T. J., & Forsythe, S. G. (2001). *MS Windows XP: Introductory concepts and techniques*. Cambridge, Mass: Course Technology.
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- Stephen, M. (2007). *Excel 2007*. London: Teach Yourself.
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- Turban, E. (2005). *Introduction to information technology*. New York: John Willey.
- Ulrich, L. A. (2003). *How to do everything with Microsoft Office 2003*. New York: McGraw Hill.
- Wang, W. (2007). *Office 2007 for dummies*. Indianapolis, Ind: Wiley.
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- Weverka, P. (2007). *Office 2007 all-in-one desk reference for dummies*. Hoboken, NJ: Wiley Pub. Inc.

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LIS18001GE-CITATION AND REFERENCING TECHNIQUES - I  
(2 Credits)

*Credit Pattern*

Lecture	Tutorial	Practical	Total
01	01	0	02

**Objective**

- To have an understanding of various citation styles in the scholarly communication procedures.

*Student learning outcome:*

- The paper will be of great benefit to the students as it will help them to understand the philosophy of “Write & Cite” which in turn will save them the menace of plagiarism. It will also help them to change the citation tune in accordance to the changing scholarly platforms.

UNIT I

- 1.1 Citations and References: Definition and need
- 1.2 Citation and Referencing Principles
- 1.3 Citation Reference Styles

UNIT II

- 2.1 Bibliographic and Descriptive Elements of References
- 2.2 Prominent Citation Styles
  - 2.2.1 APA
  - 2.2.2 MLA
  - 2.2.3 Chicago
- 2.3 Citation conversions & Reference Management Tools: An Overview

*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*.  
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Fox, T., Johns, J., & Keller, S. (2007). *Cite it right: The SourceAid guide to citation, research, and avoiding plagiarism*. Osterville, MA: SourceAid LLC.

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LIS18001OE-OPEN SOURCE SOFTWARE  
(2 Credits)

**Credit Pattern**

Lecture	Tutorial	Practical	Total
02	0	0	02

**Objective**

- To familiarize with the basic concepts and components of Open Source software, allied tools and Open source content and database management systems used in modern IT environment.

*Student Learning 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.

**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.

**References**

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Joomla (2015).Joomla.Available at

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LibreOffice(2015). LibreOffice.Available at

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*NeoOffice(2015). NeoOffice. Available at*

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*OpenCms(2015). OpenCms. Available at*

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

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**2<sup>nd</sup> Semester**  
**2<sup>nd</sup> Semester**

**Semester II****2<sup>nd</sup> 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	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

*Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

**Objectives**

- To introduce principles and practices of management with particular reference to library and information centers for managing them on scientific basis.
- To use management techniques to achieve the organizational effectiveness and efficiencies in library and information centers
- To develop skills for handling effectively the library and information management routines, finances and human resource development

*Student Learning 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.

*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 Hertzberg'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/CPM

### *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**

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**Mahapatra, P.(1997). *Library management*. Calcutta: World Press.**

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Milosevic,D.Z.(2003).Project Management Toolbox.NewJersey:Wiley

Mittal, R.L. (1984).Library administration: Theory and practice. 4 Ed. New Delhi: Metropolitan.

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R.D. & Moran, B.B. (2004).*Library and information center management*.(6<sup>th</sup> ed.).U.S.A:

***Libraries Unlimited.***

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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.

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Valacich, J.S., George, Joey. E. & Hoffer, J.A. (2003). *Essentials of system analysis and design* (2<sup>nd</sup>ed.). New Jersey: Prentice Hall.

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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 Pub

**(Theory& Practice) (4**

**Credits)**

**Credit Pattern**

Lecture	Tutorial	Practical	Total
01	01	2	04

**Objective**

- To acquaint and equip students with the principles, standards, techniques of knowledge retrieval tools in libraries and information centers especially with reference to cataloguing of documents and digital objects.

*Student learning 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.

**U**

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

**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
  - 3.2.3 Documents written by more than three authors Principle author not indicated

- 3.3 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. Brubaker, J. M. L. S. M. A. (November 01, 2002). Ambiguous Authorship and Uncertain Authenticity: A Cataloger's Dilemma. Cataloging & Classification Quarterly, 34, 4, 19-30.**
- Canadian Library Association. Chartered Institute of Library and Information Professionals (Great Britain), Joint Steering Committee for Development of RDA.& American Library Association. (2010). RDA toolkit: Resource description & access. Chicago, IL: American Library Association.**
- De, S. S. M., & Zainab, A. N. (January 01, 2001). An Adviser for Cataloguing Conference Proceedings: Design and Development of CoPAS. Cataloging & Classification Quarterly, 29, 3, 63-80.**
- Dowski, C. A. (January 01, 2002). Introduction to AACR2r Revised Chapter 12. Serials Review, 28, 4, 334-338.**
- El-Sherbini, M. (2013). RDA: Strategies for implementation.**
- Falk, P. K., & Hunker, S. D. (2010). Cataloguing outside the box: A practical guide to cataloguing special collections materials. Oxford: Chandos Pub.**
- Fritz, D. A., & Farmer, L. S. J. ( 2007). Cataloging with AACR2 and MARC21: 2006 accumulation for books, electronic resources, sound recordings, videorecordings, and serials. Chicago, Ill: American library Association.**
- Gorman, M. ( January 01, 2003). Cataloguing in an Electronic Age. Cataloging & Classification Quarterly, 36, 3-4.**
- Guide to Cataloging DVDs Using AACR2r Chapters 7 and 9- <http://www.olacinc.org/capc/dvd/dvdprimer0.html>. ( January 01, 2007). Technical Services Quarterly, 24, 3, 91.**
- Hillis, K., Petit, M., & Jarrett, K. (2013). Google and the culture of search.**
- In Landry, P., In Bultrini, L., In O'Neill, E. T., In Roe, S. K., & International Federation of Library Associations and Institutions. (2011). Subject access: Preparing for the future.**

- International Federation of Library Associations and Institutions., International Federation of Library Associations and Institutions., International Federation of Library Associations and Institutions., & IFLA UBCIM Programme. ( 1987). ISBD (NBM): International Standard Bibliographic Description for Non-Book Materials. London: IFLA Universal Bibliographic Control and International MARC Programme.*
- International Federation of Library Associations and Institutions. ( 2007). International Standard Bibliographic Description (ISBD). München: K.G. Saur.*
- Kidane, R. (January 01, 2013). Cataloguing in the digital age: Cataloguers' and library schools' opinions on RDA and AACR2r. Aliss Quarterly, 8, 4, 24-34.*
- Library of Congress. ( 2011). Library of Congress subject headings. Washington, D.C: Library of Congress, Cataloging Distribution Service.*
- Lubas, R. L. ( 2011). Practical strategies for cataloging departments. Santa Barbara, Calif: Libraries Unlimited.*
- Online Audiovisual Catalogers, Inc. (2002). Guide to cataloging DVDs using AACR2r chapters 7 and 9. United States: Online Audiovisual Catalogers.*
- 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.*
- Sangma, S. K. ( 2013). AACR2R with MARC21: Cataloguing practice for twenty-first century. New Delhi: Centrum Press.*
- Satija, M. P. ( 2011). Theory and practice of subject headings: The Sears list. New Delhi: Today & Tomorrow's Printers and Publishers.*
- Satija, M. P., & Haynes, E. (2008). User's Guide to Sears List of Subject Headings. Lanham: Scarecrow Press.*
- Satija, M. P., & Haynes, E. (2008). User's guide to Sears list of subject headings. Lanham, Md: Scarecrow Press.*
- Sears, M. E. (1950). Sears list of subject headings. New York: H.W. Wilson Co.*
- Sears, M. E., & Miller, J. (2000). Sears list of subject headings. New York: H.W. Wilson Co. Smallwood, R. F. (2013).*
- Managing electronic records: Methods, best practices, and technologies.*
- The Recent Trends of AACR2R 2002 Revision. (March 01, 2003). Journal of the Korean Society for Information Management, 20, 1, 251-270.*
- Weber, M. B. (2002). Cataloging nonprint and Internet resources: A how-to-do-it manual for librarians. 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

### Objectives

- To provide an overview of different categories of references and information tools in order to choose appropriate source for meeting reference queries.
- To understand the criteria for evaluation of reference and information sources (online and offline).
- To acquaint students with access options and techniques of various web based resources.

#### ***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***

- and
- 3.1 Directories- Institutional (Europe World of Learning, Ulrich's periodical directory  
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*. (11<sup>th</sup> ed.). Chicago: A.L.A. Bonn,
- George S. (1971). Literature of Science and Technology. In *McGraw-Hill Encyclopedia of Science and Technolog*, (8<sup>th</sup> ed .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* . (3<sup>rd</sup> ed.). London: Crosby
- Lockwood (NA)**
- 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*. (7<sup>th</sup> ed.). (V. 3). New York: McGraw Hill.
- Lea, Peter w., & Day, Alan. (Eds.). (1996). *The Reference Sources Handbook* (4<sup>th</sup> ed.). London: Library Association (NA)
- 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. (NA)

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/](http://www.accessscience.com/)*

*DOAJ -- Directory of Open Access Journals. Available at [www.doaj.org/](http://www.doaj.org/)*

*DOAB: Directory of Open Access Books. Available at*

*[www.doabooks.org/](http://www.doabooks.org/)*

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

*[ebook portals](http://bookleads-ebookportals.com/)*

*Encarta Encyclopedia. Available at*

*[www.encarta.msn.com/](http://www.encarta.msn.com/) Europa*

*World of Learning*

*[www.worldoflearning.com/views/advanced\\_search.html](http://www.worldoflearning.com/views/advanced_search.html) Library of*

*Congress Catalogue. Available at*

*[www.catalog.loc.gov/](http://www.catalog.loc.gov/) List*

*of online dictionaries*

*[http://en.wikipedia.org/wiki/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](http://en.wikipedia.org/wiki/List_of_online_encyclopedias) Merriam*

*WebsterOnline. . Available at*

*[www.m-w.com/dictionary/](http://www.m-w.com/dictionary/)*

*Onelook.dictionary, available at*

*[www.onelook.com/](http://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/](http://www.oed.com/)

*Times Atlases - home of Times World Atlases and Maps* [www.timesatlas.com/](http://www.timesatlas.com/)

*Ulrichsweb. Available at*

[ulrichsweb.serialssolutions.com/](http://ulrichsweb.serialssolutions.com/) VidyaNidhi.

*Available at*

[www.dspace.vidyanidhi.org.in:8080/dspace/](http://www.dspace.vidyanidhi.org.in:8080/dspace/) Wikipedia.

*Available at*

[wikipedia.org/](http://wikipedia.org/)

LIS18204CR -DIGITAL LIBRARY TECHNOLOGY

*(4 Credits)*

*Credit Pattern*

Lecture	Tutorial	Practical	Total
3	0	1	4

**Objective**

- To focus on various aspects of Digital Libraries and develop skills for building and managing Digital Collections.

*Student Learning 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](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](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>**

**Greenstein, D. (n.d.). *Digital Libraries and Their Challenges*. Graduate School of Library and Information Science. University of Illinois at Urbana-Champaign. Available at**

**[https://www.ideals.illinois.edu/bitstream/handle/2142/8339/librarytrendsv49i2f\\_opt.pdf?sequence=1](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.**

**Hider, P., & American Library Association. (2013). *Information resource description: Creating and managing metadata*. Chicago, Ill: ALA editions.**

**Hillmann, D.I., & Westbrooks, 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.**

Kresh, D., & Council on Library and Information Resources. (2007). *The whole digital library handbook*.  
**Chicago: American Library Association.**

Kumar,S(2009).*Digital Library Development*.NewDelhi:Rajat Pub.

Lankes, R. D. (2011). *The atlas of new librarianship*.

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.

Library and Information Technology Association (U.S.). (2002). *Open source software for libraries: An open*  
*source for libraries collaboration*. Chicago: LITA.

Lovett, A. (2004). *Lingua Franca*. New Paltz, N.Y. : Ann Lovett.

**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.Newyork: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.Newyork:Neal-Schuman***

## LIS18205DCE - DISASTER MANAGEMENT AND PREPAREDNESS IN LIBRARIES

*4 credits*

### *Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

### **Objective**

- To sensitize and equip budding professionals with necessary skills and knowledge to manage different types of disasters affecting libraries, archives and information centres.

### *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 .InThe Electronic Magazine 1.2 .<http://www.nla.gov.au/nla/staffpaper/lyll1.html>
- Marelli, Nancy (1991 .)Les Sinistres :prevention etplanificationd'urgence, comment prevenir la perte des documents d'uneorganisationlors d'un sinistre .Archives 22(3:)3-28.
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- 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

**Objective**

- To acquaint students with University Library system it's Components, Services and problems.

*Students learning outcomes:*

- This paper will help the student to know the different facets of university library system.

**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

**Objectives**

- To understand the nature of preservation and conservation management, its components and implications.
- To understand the physical composition of reading material and causes of deterioration.
- To understand preservation and conservation standards.
- To identify technological options in the preservation.

*Student learning 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, GonçaloAntunes, 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/](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

**Objective**

- To focus on various web based technologies used for enhancement of health-related information

*Student learning 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:**

**[http://www.who.int/healthinfo/statistics/toolkit\\_hss/EN\\_PDF\\_Toolkit\\_HSS\\_InformationSystems.pdf](http://www.who.int/healthinfo/statistics/toolkit_hss/EN_PDF_Toolkit_HSS_InformationSystems.pdf)**

## LIS18002GE-CITATION AND REFERENCE MANAGEMENT SOFTWARE

(2 Credits)

### Credit Pattern

Lecture	Tutorial	Practical	Total
2	0	0	2

### Objectives

- To sensitize students with reference management software.
- To sharpen their skills in one such reference management software for education and research purpose.

### Student Learning 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.

### U

- 1.1 Reference Management: Concept and Importance
- 1.2 Reference Management Software: Zotero, Mendeley, EndNote, Refworks, etc.
- 1.3 Citation and Referencing Styles (APA, MLA, etc.)

### I

### 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 Papyrus with 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](https://apps.webofknowledge.com)*

*Credit Pattern*

Lecture	Tutorial	Practical	Total
1	1	0	2

**Objectives**

- To acquaint with the concept of Information Literacy, its role and impact on modern Libraries and on student's information seeking behavior.

*Students learning outcomes*

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

**Unit-I Information Literacy: Introduction and importance**

1. Information Seeking Behavior: Overview  
1
1. Information Literacy: Concept, Need and Objectives  
2
1. Areas of Information Literacy  
3
1. Standards in Information Literacy  
4

**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.



**3<sup>rd</sup> Semester**

**Semester III**

3<sup>rd</sup> 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

### Objectives

- To know various types of information retrieval Systems; their characteristics, evaluation, performance, and models.
- To acquaint with various tools, techniques and emerging online IR systems.

### *Student Learning 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 Parameters

#### *Suggested Readings*

- Chodhury, C.G. (2004). *Introduction to Modern Information Retrieval*. (2<sup>nd</sup>ed.). 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*

### Objective

Lecture	Tutorial	Practical	Total
0	0	4	4

- To impart practical, know-how of different Operating Systems, word processors, Spreadsheets and developing bibliographic databases using select packages.

### *Student Learning 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.**

<b>Practical.1.2.4</b>	<b><i>Introduction to Windows Accessories, Search and Run Features. Practical</i></b>
<b>1.2.5</b>	<b><i>Add remove Programs/Hardware</i></b>

## *Unit-II*

### 2.1 MS WORD (latest available)

<b>Practical 2.1.1</b>	<b><i>Creating and editing a document.</i></b>
<b>Practical 2.1.2</b>	<b><i>viewing and Inserting various objects and utilities in document. Practical</i></b>
<b>2.1.3</b>	<b><i>Formatting a document with different attributes</i></b>
<b>Practical 2.1.4</b>	<b><i>Tools for Security, Letters and Mailing. Practical 2.1.5</i></b>
	<b><i>Designing and insertion of different tables etc</i></b>

### 2.2 MS EXCEL (latest available)

<b>Practical 2.2.1</b>	<b><i>Introduction to Creation, Editing and Saving of Excel.</i></b>
	<b><i>Workbooks and Workspaces. Inserting worksheets, rows and columns. Working with Cells and Ranges.</i></b>
<b>Practical 2.2.2</b>	<b><i>Working with Excel Functions like Date and Time, Math and Trig, Statistical, Text and Logic.</i></b>
<b>Practical 2.2.3</b>	<b><i>Working with Excel Charts.</i></b>
<b>Practical 2.2.4</b>	<b><i>Changing worksheet Layout, Other Formatting Options. Practical</i></b>
<b>2.2.5</b>	<b><i>Goal Seek and Creation of Lists.</i></b>

## *Unit-III*

### 3.1 MS ACCESS (latest available)

<b>Practical 3.1.1</b>	<b><i>Creating a Blank Database in Access.</i></b>
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<b>Practical 3.1.2</b>	<b>Working with Tables using design view, using wizard and by entering data.</b>
<b>Practical 3.1.3</b>	<b>Creating Queries</b>
<b>Practical 3.1.4</b>	<b>Understanding relationships.</b>
<b>Practical 3.1.5</b>	<b>Creating Forms.</b>

#### *Unit-IV*

##### 4.1 LibreOffice

<b>Practical 4.1.1</b>	<b>Introducing and Setting Up LibreOffice.</b>
<b>Practical 4.1.2</b>	<b>Getting Started with Writer.</b>
<b>Practical 4.1.3</b>	<b>Getting Started with Calc. Practical</b>
<b>4.1.4</b>	<b>Getting Started with Impress.</b>
<b>Practical 4.1.5</b>	<b>Getting Started with Draw and Base</b>

#### *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 2<sup>nd</sup>ed)*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.[https://support.office.com/en-us/article/Download-Office-2010-training-7F477C0F- D72F-4848-B960-98BF08D779AB](https://support.office.com/en-us/article/Download-Office-2010-training-7F477C0F-D72F-4848-B960-98BF08D779AB)**

## LIS18303CR- INFORMATION SERVICES AND SYSTEMS

*(4 Credits) Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

### Objectives

- To acquaint with reference and Information services, systems and their utility and significance.
- To understand various types of users, their information needs and seeking pattern etc.

### *Students learning outcome*

***After completion of this course, you 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 3<sup>rd</sup> 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. (4<sup>th</sup> 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. (3<sup>rd</sup> Rev. Ed.)*. Calcutta: World

**Neelamegha 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).**

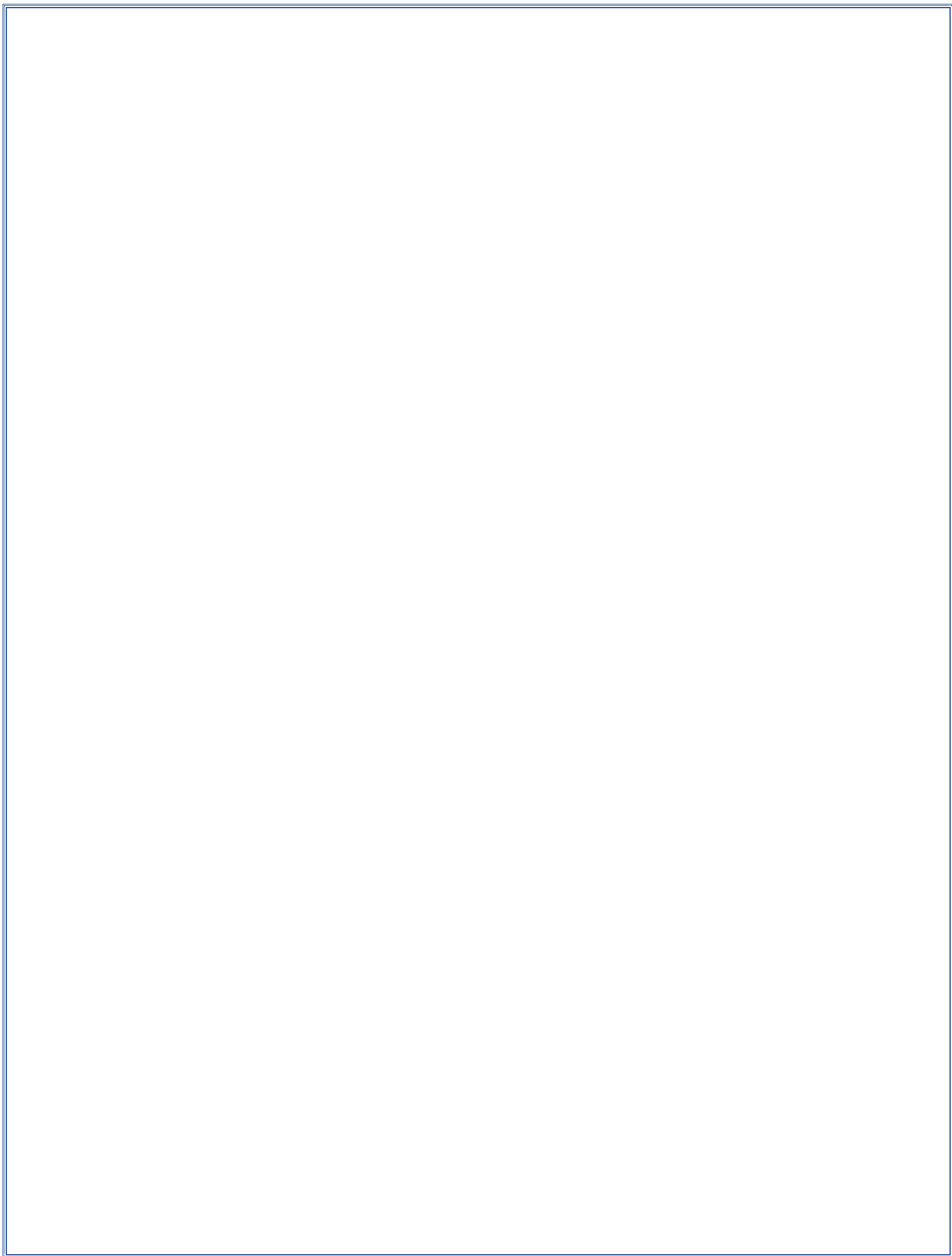
**Available at**

**<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

**Objective**

- 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.

*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.

*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

### Objective

- To sensitize the students with OA movement and its tool, resources, challenges and opportunities

### *Students learning 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-accessjournals-quantity-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.
- Harnad, S. (2008). *The postguttenberg open access journal*. In Cope, B.; Phillips, A (eds.). *The future of the academic journal*. London: Chandos. <http://eprints.soton.ac.uk/265617/2/PG-chandos-harnad.pdf>
- Harnad, S. (2010). *The Open Challenge: A Brief History*. *Public Service Review: European Science & Technology*, 9, 13-15.
- Joshi, Meenakshi. (2000). *Scholarly Communication and the Internet*. ([Http://hdl.handle.net/1849/38](http://hdl.handle.net/1849/38).) drtc.
- Knapp, M. L., Daly, J. A., & International Communication Association. (2004). *A guide to publishing in scholarly communication journals*. Mahwah, N.J: Lawrence Erlbaum.
- Laakso, M., et al. (2011). *The development of open access journal publishing from 1993 to 2009*. *PLoS ONE*, 6(6). doi:10.1371/journal.pone.0020961
- Loy, M. (2011). *Hindawi Publishing Corporation: Growing an Open-Access Contributor-Pays Business Model*. Updated 2011. London: Ithaka.  
[http://sca.jiscinvolve.org/wp/files/2009/05/iDF153SCA\\_Ithaka\\_CaseStudies\\_v2\\_Hindawi\\_v1-03.pdf](http://sca.jiscinvolve.org/wp/files/2009/05/iDF153SCA_Ithaka_CaseStudies_v2_Hindawi_v1-03.pdf)
- Parekh, H. (1999). *Internet in the scholarly communication process*. Mumbai: KnowledgeWare. Shorley, D., & Jubb, M. (2013). *The future of scholarly communication*. London: Facet Publishing,
- Sompel, Herbert van de, Payette, Sandy, Erickson, John, Lagoze, Carl, & Warner, Simeon. (n.d.). *Rethinking scholarly communication: building the system that scholars deserve*.
- 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>.
- Swan, A. (2006). *Repositories overview: policies and implementation*. *Open Scholarship 2006: New challenges for Open Access repositories*. Retrieved from <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

### Objectives

- To understand development of Agricultural science, resources and information systems useful to various stakeholders in accessing information.
- To familiarize students with the meaning, definition, use and implications of Agricultural Information Systems
- To study various source of agricultural information like organizations and databases.

### *Student learning 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 ShoaibAhsan.(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](http://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](http://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/](http://www.fao.org/WAICENT/)*

## LIS18307DCE-WEB 2.0 & ADVANCED TECHNOLOGIES

### *Credit Pattern*

Lecture	Tutorial	Practical	Total
3	0	1	4

### **Objectives**

- To acquaint students with web 2.0 features and functions with emphasis on fast changing features of web 2.0 to web X.0.
- To develop hands on exposure of web2.0 tools, technology and services.

### *Student learning 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 2.0: What Librarians Need to Know" by Elizabeth Black***

## LIS18308DCE- OPEN SOURCE TECHNOLOGY

*(4 Credits)*

### Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

### Objective

- To focus on various aspects of Open Source Technology and develop skills for installing and using different Open Source Software.

### *Student Learning 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

### Objectives

- To make students understands about the web resources.
- To sensitize stakeholders of different challenges to harnessing web based information and how to overcome these challenges.

### *Student learning 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 HOFSTEDE, 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

(2Credits)

### Credit Pattern

Lecture	Tutorial	Practical	Total
01	01	0	02

### Objectives

- To make students understands about the information literacy, information sources etc.
- To sensitize stakeholders of different evaluation criteria's which are helpful for evaluating different web resources

### *Student learning outcomes*

- The paper will aquent 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.*

*Chodhury, C.G. (2004). Introduction to Modern Information Retrieval. (2nd ed.). London: Facet Pub. 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.*



**4<sup>th</sup> Semester**

**Semester IV**

4 <sup>th</sup> 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

*(4 Credits)*

*Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

### Objectives

- To get acquainted with foundations of research, various methods (including online ones), planning, designing and professional reporting in the field of Library and Information Science.

### *Student learning 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.
- 2.3 Citation and Reference Styles with Special emphasis on APA Style.



2.3.1 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*. (4<sup>th</sup>Rev.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.

- Croxton, F. E. (1969). *Applied general statistics*. (3<sup>rd</sup>ed). 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: KitabMahal.
- Frankfort, C., & Nachmias, D. (1999). *Research methods in social sciences*. (6<sup>th</sup>ed. 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* (2<sup>nd</sup>ed.). 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*. (9<sup>th</sup>ed.). New Delhi: Prentice Hall.
- Khanna, J.K. (1997). *Library Compendium*. New Delhi: Beacon Books.
- Kumar, K. (1999). *Research Methods in Library and Information Science*. (2<sup>nd</sup> 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: EssEss.
- Simpson, I.S. (1988). *Basic statistics for librarians*. (3<sup>rd</sup> 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* (2<sup>nd</sup> ed.). New Delhi: Biztantra.

## LIS18402CR-LIBRARY AUTOMATION AND NETWORKING

*(Theory)*

*Credit Pattern*

Lecture	Tutorial	Practical	Total
3	1	0	4

### Objectives

- Develop an understanding of current applications of computer and communications technology in library and information services.
- To acquaint about emerging technologies useful for information access like Digital Libraries and allied concepts.

*Student learning 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>

Also available at: <http://www.ps.uni-sb.de/~duchier/pub/vbush.shtml>

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., & MacColl, 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: Comman 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 acces. 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)

*(4Credits)*

*Credit*

*Pattern*

### Objectives

Lecture	Tutorial	Practical	Total
0	0	4	4

- To educate and train budding professionals in running automated library with state of the art library management software.
- To create, manage, and access e-content useful for knowledge and development by developing interfaces, sensitizing in Web designing, familiarizing searching techniques and emerging web services besides facilitating print and web resource management.

### *Student learning 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, RSSfeed, U-tube, wikis etc.)**
- Practical 4.5**      **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 TechSource.
- 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 (2<sup>nd</sup> 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, Ill: Dow Jones-Irwin Professional

McCormick, J. A. (1994). *The new optical technology: including multimedia, CD-ROM and optical drives*. Burr Ridge, Ill: 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., & Sargent, 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: CyberTech 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.)*. Indianapolis, IN: New Riders Pub.

#### *Websites (Illustrative):*

University of Waikato. (2017). About Greenstone. Available at: <http://www.greenstone.org/>

*University of Waikato. (2017). GreenstoneWiki. 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

### Objective

- The main objective of the “project report” is to pursue a current problem in the field of Library & Information science to explore its facets thoroughly and come out with solutions or ways in a scientific way.

### Student learning 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 (2<sup>nd</sup> ed.)*. 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

### Objectives

- To acquaint students with the problems faced by research community in using web Based information
- To acquaint students with Tactics and Strategies for dealing with such sources
- To acquaint students with sources and tools dealing with web based information

### *Students learning 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 Challenge to Harnessing Web-Based Information
  - 1.2.1 Information Overload and Resources Evaluation
  - 1.2.2 Web Site Navigation, Reliability and Browseability 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-II 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.*

*HOFSTEDE, 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

### Objective

- To focus on various aspects of Content Management and develop skills for building and managing Digital Collections. Using different Content Management Systems

### *Student learning 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.

### **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

### Objective

- To focus on various aspects of Open Education and develop skills for using, modifying, repurposing and redistributing Open Educational Resources for enriching life-long learning.

### *Student learning outcome*

- The course helps to develop better understanding of selecting, creating and using Open educational resources for supporting interactive learning experiences.

### *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 Licences: 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*

*AchalPrabhala. (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>





