MANGALORE UNIVERSITY

SYLLABUS

MASTER OF LIBRARY AND INFORMATION SCIENCE
(M.L.I.Sc.)

COURSE AS PER CHOICE BASED CREDIT SYSTEM

Programme Outcomes

Mangalore University as a centre for higher learning, research and training continuously strives to impart high quality post graduate education in science, social science, humanities and languages. It promotes quality academic research in all areas of knowledge and contributes significantly to the knowledge growth for nation's prosperity. It trains academicians, researchers, practitioners and executives with advanced skills through continuous learning programs.

University's Program outcome

Mangalore University strives to produce post graduates in science, social science, humanities and languages with the knowledge, analytical skills, ethical values and leadership qualities. The post graduate students of this university:

Learning:

PO01 Apply their learning to specific problems and challenges in their workplace and professional settings
PO02 Use their knowledge to positively impact their profession, communities, and society
PO03 Demonstrate an understanding of the methods of inquiry used in their professional or academic field
PO04 Practice legal and ethical integrity in their professional work and demonstrate a commitment to lifelong learning.
PO05 Effectively communicate their ideas and the rationale behind them to others
PO06 Facilitate positive social change where they work, in their communities, and in society.
PO07 Support diversity and multiculturalism within their profession, communities, and society.

Teaching:

PO08 Demonstrates understanding of the practices of curriculum design, instructional planning and assessment as they relate to continuous improvement of teaching and learning and how they each fit into a systems approach to teaching and learning.
PO09 Demonstrates the capacity to develop professional learning communities within the university and the capacity to infuse data and information into the collaborative process of developing better practices in teaching and learning.
PO10 Demonstrates how to plan for curriculum, instruction and assessment that honours diversity and cultural competence.
PO11 Provides assessment of student learning in ways that promote student self-assessment; provide information needed by teachers to adjust instruction, and frames the information needed for public reporting of student learning.
PO12 Provides for the continuous professional development of all instructional staff to continuously improve practice and ensure the capacity to teach all students, advancing equity in opportunities to learn and the equitable distribution of learning outcomes.

Research:

PO13 Promotes academic research by producing quality research outputs of research studies of national importance

PO14 The research outputs contributes significantly to the growth of literature and nation's prosperity.

PO15 The researchers gain strong inquiry, analytical and critical thinking and practice them in decision making activities.

PO16 As quality research is self-driven, it keeps igniting mind of researchers for further research studies /projects useful for profession and society. Government and other agencies do encourage research studies for national growth and prosperity

As part of continuous improvement processes, program outcomes may be modified over time by the university to clarify the aims of programs and further support student learning.

PROGRAMME SPECIFIC OUTCOMES (PSO)

MLIS Program Learning Outcomes

Library is a service organization whose products are tangible and intangible. The basic philosophy of any library is to serve and satisfy the information needs of information seekers. Library and Information professionals must be aware of diverse information needs and ensure those needs are met. The Dept. of Library and Information Science (LIS) of Mangaluru University equips students with the necessary knowledge and skills to accomplish this across a broad range of occupations and contexts in all types of library and information centres (public, academic, special S&T, R&D, health etc). The university's LIS graduates understand both the theory and the practice of LIS as a subject discipline: 1) they study the foundations and principal ideas of the discipline, and they have been introduced to the values and expectations of the profession. 2) The faculty members foster critical thinking about the literature of LIS and related fields, and they encourage high standards of professionalism and service. 3) The LIS graduates of the Mangaluru University are prepared to develop and evaluate resources and programs and to understand the needs of different kind of users. Students who have completed LIS program are equipped to anticipate social and technological changes, and to promote change that advances the profession, improves technology, and encourages positive social transformation.

Upon completion of the MLIS program, students will be able to:

PSO1: Understand the basic concept of library and information science professions

PSO2: Integrate as a part of the university efforts in democratizing access to information by training the graduates from different backgrounds to become proactive knowledge workers in the process of collecting, organizing, consolidating, repackaging and disseminating the knowledge/ information for social transformation, scientific and technological growth and economic prosperity.

PSO3 Preparing the manpower to be dynamic social change agents in managing, monitoring and disseminating the information by utilizing the ICT and related technologies.

PSO4: Training the manpower in capturing and preserving the tacit knowledge in the light of the emphasis on the importance of traditional knowledge. Restructuring and reviewing LIS curriculum to cope up with changing socio- economic, cultural and technological environment.

PSO5: Create an awareness of the evolution of the knowledge society an its role in the social transformation.

PSO6: Analyze the complex issues of the access and use of knowledge and its productive utility in the social development.

PSO7: Promote the use of new technologies in teaching and research.

PSO8: Promote leadership qualities and inculcate right values among students by encouraging the ethical practice.

SYLLABUS FOR

MASTER OF LIBRARY AND INFORMATION SCIENCE (M.L.I.Sc.) COURSE AS PER CHOICE BASED CREDIT SYSTEM (CBCS) (SEMESTER SCHEME)

I–SEMESTER

Course code	Title of the Course	Scheme of examination						
		IA	Univ. Exam.	Total Marks	Credit Patten			Credit Value
					L	T	P	
Hard Core								
LSH401	Foundations of Library and Information Science	30	70	100	3	1	0	4
LSH402	Information Processing: Classification	30	70	100	3	1	0	4
LSH403	Information Processing: Cataloguing	30	70	100	3	1	0	4
LSH404	Information Technology–I	30	70	100	3	1	0	4
Soft Core								
LSP405	Information Processing: Classification–I (Practice)	30	70	100	0	1	3	4
LSP406	Information Processing: Cataloguing–I (Practice)	30	70	100	0	1	3	4

II–SEMESTER

Course code	Title of the Course	Scheme of examination						
		IA	Univ. Exam.	Total Marks	Credit Patten			Credit Value
					L	T	P	
Hard Core								
LSH451	Management of Libraries and Information Centres-I	30	70	100	3	1	0	4
LSH452	Information Technology–II	30	70	100	3	1	0	4
LSP453	Information Processing: Classification–II (Practice)	30	70	100	0	1	3	4
LSP454	Information Technology–I (Practice)	30	70	100	0	1	3	4
Soft Core								
LSS455	Information Sources and Services	30	70	100	3	1	0	4
Open Elective								
LSE456	Reference/Information Sources	30	70	100	3	1	0	4

III–SEMESTER

Course code	Title of the Course	Scheme of examination						
		IA	Univ. Exam.	Total Marks	Credit Patten			Credit Value
					L	T	P	
Hard Core								
LSH501	Information Retrieval	30	70	100	3	1	0	4
LSH502	Management of Libraries and Information Centres-II	30	70	100	3	1	0	4
LSH503	Research Methods in Librarianship	30	70	100	3	1	0	4
Soft Core								
LSP504	Information Processing: Cataloguing -II (Practice)	30	70	100	0	1	3	4
LSP505	Work Experience and Library Tour	30	70	100	0	0	0	4
Open Elective								
LSE506	Reference/Information Services	30	70	100	3	0	0	3

IV–SEMESTER

Course code	Title of the Course	Scheme of examination						
		IA	Univ. Exam.	Total Marks	Credit Patten			Credit Value
					L	T	P	
Hard Core								
LSH551	Information Systems and Services	30	70	100	3	1	0	4
LSH552	Information Technology – III	30	70	100	3	1	0	4
LSP553	Information Technology – II (Practice)	30	70	100	0	1	3	4
LSP554	Dissertation	30	70	100	0	1	3	4
Soft Core								
LSS555	Management Information System (MIS)	30	70	100	3	1	0	4
OR								
LSS556	Conservation and Preservation of Information Resources							

List of Hard Core, Soft Core and Open Elective courses

Hard Core

LSH401	Foundations of Library and Information Science
LSH402	Information Processing: Classification
LSH403	Information Processing: Cataloguing
LSH404	Information Technology–I
LSH451	Management of Libraries and Information Centres-I
LSH452	Information Technology–II
LSP453	Information Processing: Classification–II (Practice)
LSP454	Information Technology–I (Practice)
LSH501	Information Retrieval
LSH502	Management of Libraries and Information Centres-II
LSH503	Research Methods in Librarianship
LSH551	Information Systems and Services
LSH552	Information Technology – III
LSP553	Information Technology – II (Practice)
LSP554	Dissertation

Soft Core

LSP405	Information Processing: Classification–I (Practice)
LSP406	Information Processing: Cataloguing–I (Practice)
LSS455	Information Sources and Services
LSP504	Information Processing: Cataloguing -II (Practice)
LSP505	Work Experience and Library Tour
LSS555	Management Information System (MIS)
LSS556	Conservation and Preservation of Information Resources

Open Elective

LSE456	Reference/Information Sources
LSE506	Reference/Information Services

I SEMESTER

Hard Core

LSH401: FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE

Objectives:

- To introduce the students with the basics of library and information science.
- To identify the types of libraries and understand the functions, activities and services.
- To provide students an understanding about philosophies of library science, its basic principles, fundamental laws, guidelines and social impact.
- To understand the importance of library associations/organizations and their role in lifelong learning.
- To educate students about growth, development of libraries and library professional ethics.
- To train students for a professional career in Library and Information Services
- To understand the Library and Information Profession.

Course Outcome (CO):

CO1	Gain clear understandings of LIS as professional education, its values and philosophies that govern the activities in the practicing world.
CO2	Obtain proper understanding of functions and services of various types of libraries.
CO3	Differentiate functions and activities between different types of libraries.
CO4	Gain knowledge about library legislation, acts, IPR, and copyright.
CO5	Understand the activities, roles and responsibilities of professional associations in LIS.
CO6	Have the knowledge of public relations and library extension activities.
CO7	Understand the basic philosophy and principles of LIS professionalism,

Unit 1	:	Library as a Social Institution: Social and Historical foundations of Library; Different types of Libraries – features, functions and services. Role of libraries in social, cultural, educational and scientific technical development. Information Society: Data, information, and knowledge, concept, meaning and features. Evolution of information society.	08hrs
Unit 2	:	Five Laws of Library Science; Implications of Five Laws in Library and Information Activities.	08hrs
Unit 3	:	Library Development: Development of Libraries in India with special reference to Karnataka. National Knowledge Commission (NKC) and its role.	06hrs
Unit 4	:	Library Legislation – need, purpose and essential features; Library Legislation in India – problems and prospects; Overview of Public Library Acts in India. Detailed study of Karnataka Public Library Act 1965; Press and Registration Act and Delivery of Books (Public Libraries) and News paper Act, 1954 and 1956; Copyright Act and Intellectual Property Rights (IPR). Right to Information Act. Information technology Act 2000.	08hrs
Unit 5	:	Library and Information Profession: Attributes of a Profession; Librarianship as a Profession; Professional Ethics and Qualities; LIS Education and Research.	06hrs

Unit 6	:	Professional Associations: Professional Associations–Objectives and Functions; Role of Professional Associations in Library Development; National Library Associations-Objectives, Functions and Activities. ILA, IATLIS, IASLIC; International Library Associations–Objective, Functions and Activities IFLA, ALA, LA; Promoters of Library and Information Services, National level, RRRLF, International Level - UNESCO. State Library Association –KALA.	08hrs
Unit 7	:	Public Relations and Extension Activities: Concept, Definition and Scope; Facets and Programmes; Publicity and Extension, Outreach Activities; Library Path Finder's (Guides).	06hrs

References:

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23. K.A. Isaac: Library legislation in India, ESS-ESS publication, New Delhi, 2004.
24. K.S. Deshpande: University Library system in India, sterling publishers, New Delhi, 1985.
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26. H.K. Srivastava: Foundation of Library and Information Science, Mohith publications, New Delhi, 2011.
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28. Jagtar Singh: Information democracy and South Asia Promises and perils of the web, Medallion Press, Ludhiana, 2003.
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30. Khaisar M. Khan, Gopa Kumar V., Vishala B.K.: Proceedings of the National conference on 'Empowering Library Professional in Managing Digital Resources and Providing Extension Activities' Library and Information Centre, St. Agnes College Mangalore, 2010, ISBN: 978-81-0-98546-0-6.

LSH402: INFORMATION PROCESSING: CLASSIFICATION

Objectives:

- To introduce the students with the library classification
- To understand the importance of library classification in organization of knowledge.
- To highlight the importance of canons in the design of classification schemes.
- To understand the fundamental categories.
- To understand the formation of subjects in the Universe of Subjects and be acquainted with major schemes of classification.
- To know the different schemes of classification.
- To develop skills of classification.

Course Outcome (CO):

CO1 Clear understanding the purpose, functions and principles of subject classification
CO2 Knowledge of analyzing core thought content of modes of formation of subjects
CO3 Clear understanding of criteria of classification of subjects.
CO4 Knowledge of recognizing different fundamental categories.
CO5 Gain the knowledge of constructing classifications numbers for different documents.
CO6 Knowledge and skill of using different schemes of classification that can be used for the organizing the resources
CO7 Understating of recent trends and mode of classifying e-resources.

Unit 1	:	Library classification: Definition, meaning, objectives, purpose and functions. General theory of classification, Theory of knowledge classification, Theory of book classification	06hrs
Unit 2	:	Universe of Knowledge: Structure, attributes, Modes of formation of subjects.	08hrs
Unit 3	:	Postulational approach to classification: Planes of work and Canons of Classification	08hrs
Unit 4	:	Fundamental categories: Facet analysis and facet sequence, Phase relations, Common Isolates.	08hrs
Unit 5	:	Notational system: Meaning, need, functions and types, Call Number, mnemonics. Hospitality in array and chain, Devices.	08hrs
Unit 6	:	Study of selected schemes of classification: Dewey Decimal Classification, Universal Decimal Classification, Colon Classification.	08hrs
Unit 7	:	Classification of e-resources ; Trends in Classification	04hrs

References:

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2. Parkhi, RS : Library Classification: Evolution and Dynamic Theory, Bombay, Asia, 1960
3. Ranganathan SR: Colon Classification. Ed 6, Bombay, Asia, 1963
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14. Kumar Krishna: Theory of classification, Vikas publishing house, New Delhi, 1979.
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LSH403: INFORMATION PROCESSING: CATALOGUING

Objectives:

- To be acquainted with the process of Library Cataloguing and metadata and its standards.
- To understand different catalogue codes and standards for bibliographic description.
- To practice cataloguing of different types of books.
- To understand the rules and practices of document description according to Anglo American Cataloguing Rules-2R.
- To study current trends in cataloguing.
- To develop skills of cataloguing.
- To study different subject headings.

Course Outcome (CO):

CO1	Clear understanding of purpose, functions and procedure of library cataloguing
CO2	Understanding different laws and principles of library cataloguing
CO3	Gain knowledge about subject cataloguing and use of subject thesaurus
CO4	Knowledge of applying various cataloguing codes such as RDA, AACRS II, OPAC.
CO5	Knowledge and skill of using different formats and standards that can be used for the cataloguing the resources
CO6	Understating of current trends in cataloguing
CO7	Knowledge of Union, cooperative and centralized cataloguing
CO8	Trained with use of different cataloguing standards and formats to catalogue the documents.

Unit 1	:	Library Catalogue-meaning, definition, need. Purpose and functions of library catalogue. Physical forms, Inner forms; Different kinds of entries	08hrs
Unit 2	:	Normative Principles: Laws, Canons and Principles of Catalogue	08hrs
Unit 3	:	Subject Headings: Chain Procedure, Sears List of Subject Headings, Library of Congress Subject Headings	08hrs
Unit 4	:	Study of major Catalogue Codes; AACR (latest edition); RDA (Resource Description Access); Filing rules and procedures; Online Public Access Catalogue (OPAC)	08hrs
Unit 5	:	Standardization of Bibliographic Description- ISBD (M), ISBD(S), ISBD (NBM); Metadata-Definition and meaning, types and users. Metadata Standards; UNIMARC, CCF, MARC21, Dublin Core, Z39.50 and Web OPAC.	08hrs
Unit 6	:	Co- operative, Centralized and Union Cataloguing.	06hrs
Unit 7	:	Current trends in Cataloging.	04hrs

References:

1. Ranganathan SR : Cataloguing Practice, Ed 2, Bombay, Asia, 1964.
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15. Krishna Kumar: An Introduction to Cataloguing & Practice.

LSH404: INFORMATION TECHNOLOGY – I

Objectives:

- To introduce the students with the basics of IT and related issues
- To train students in using Information Technology tools and techniques in information access, service, management and archival activities.
- To study data representation and file organization, programming languages.
- To understand Multimedia Technology, DTP and Graphics.
- To develop Information Technology skills.
- To understand the fundamentals of computers, its hardware and software.
- To be familiar with applications of Computers and Information Technology in libraries.

Course Outcome (CO):

CO1	Understand the history and development of computers and information technology
CO2	Knowledge of computer hardware and its peripherals devices.
CO3	Clear understanding of the system and application software
CO4	Gain knowledge of scripts and standards for data inputs
CO5	Knowledge of machine and assembly languages.
CO6	Gain knowledge of multimedia technology
CO7	Knowledge of graphical user interface and desktop publishing

Unit 1	:	Information Technology-Concept, Meaning and components; Computers: History and Development of Computers, Generations of Computers, Types of Computers.	06hrs
Unit 2	:	Computer Hardware: Components of computers - Arithmetic/Logic Unit, Control Unit, Input Unit, Output Unit and Memory Unit.	06hrs
Unit 3	:	Computer Software: Systems Software - Operating Systems - MS WINDOWS, Multi - User Operating Systems like Linux, Unix, Application Software – Word Processing (MS Word) MS Excel, MS Power point presentation.	08hrs
Unit 4	:	Data Representation and File Organization: Binary code, Bit, Byte, Standards-ASCII, ISCII, UNICODE, File Organization.	08hrs
Unit 5	:	Programming Languages: Machine Languages, Assembly Languages, High-Level languages, Generations of Programming Languages, Flow- Charting.	08hrs
Unit 6	:	Multimedia Technology: Concept, scope, and developments, Hypertext and hypermedia, Hardware and Software Requirements, Animations – Dimensions, Tools.	08hrs
Unit 7	:	DTP and Graphics	06hrs

References:

1. Davies, G B. Introduction to Computers. New York: McGraw- Hill, 1977
2. Donald H Sanders : Computer concepts and applications, McGraw Hill, 1987
3. Hunt R and Shelly J. Computer and Commonsense. New Delhi: Prentice, 1980
4. N Subramanian: Introduction to Computers, Tata McGraw-Hill
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Soft Core

LSP405: INFORMATION PROCESSING: CLASSIFICATION – I (PRACTICE)

Objectives:

- Construction of Class Numbers for documents of different disciplines / subjects using Dewey decimal classification 23rd edition.
- Introduction to the use of the DDC
- Analysis of a work; direct approach; Main classes, Divisions and Sections
- Use of notes likes "scope", "Inclusion", "Class here" "Optional provision" etc.
- Using synthetic features: Add from schedules
- Use of Table 1 'Standard Subdivisions'; Table 2 'Area'; Table 3 'Subdivisions of individual literature'; Table 4 'Subdivisions of individual languages'; Table 5 'Racial, Ethnic, National Groups', and Table 6 'Languages'

Course Outcome (CO):

CO1 Apply theoretical knowledge of classification into practice
CO2 Get inducted to different classification systems and apply their skills to organize documents using specific classification schemes
CO3 Knowledgeable and capable of using of specific scheme of classification at their workplace.
CO4 Use it for number building.
CO5 Gain the knowledge of constructing classifications numbers for different documents.
CO6 Knowledgeable and capable of using DDC scheme of classification at their workplace.
CO7 Understating of recent trends and mode of classifying e-resources

Classification of documents according to the latest edition of DDC. 64hrs
(Each student shall maintain practical records and submit the same at the time of practical examination).

LSP406: INFORMATION PROCESSING: CATALOGUING – I (PRACTICE)

Objectives:

- Preparing Catalogue Entries (Main, Added and Reference Entries) for Books (Monographs) using Anglo American Cataloguing Rules -2 revised edition and Assigning
- Subject Headings to all entries (Using at least one Standard Subject Heading)
- Single Personal Authorship; Joint Authorship; Works of more than three Authors
- Collaborative Works; Series; Multivolume Works; Pseudonymous Authors
- Composite Works
- Corporate Authorship: a) Government Publications b) Proceedings of Conferences, Seminars, Workshops, etc. c) Other Corporate Bodies: Organizations, Institutions, Societies, etc.
- Uniform Titles; Sacred Scripture; Anonymous Works

Course Outcome (CO):

CO1	Apply theoretical knowledge of cataloguing into practice through hands-on training
CO2	Allow students to obtain experience of classifying documents in physical/virtual libraries.
CO3	Clear understanding of AACR II
CO4	Knowledge of parts of descriptions of catalogue.
CO5	Understanding the catalogue and their parts
CO6	Get inducted to different descriptive elements and punctuations for cataloguing documents.
CO7	Knowledgeable and capable of cataloguing different documents at their workplace.

Cataloguing of Simple, compound and composite documents and serials according to latest edition of AACR/RDA (Each student shall maintain practical records and submit the same at the time of practical examination). 64hrs

II SEMESTER

Hard Core

LSH451: MANAGEMENT OF LIBRARIES AND INFORMATION CENTRES-I

Objectives:

- To train the student in the techniques of librarianship and management of Library
- Understand the application of management theories in library and information area
- To study Organizational structure of library and information centers
- To understand Technical processing and preparation of documents for use.
- To familiarize students with maintenance, preservation and conservation of information resources
- To study record management concepts and issues.
- To study Library rules and regulations.

Course Outcome (CO):

CO1	Familiarizing students to basic principles, practices, procedures to manage different types of libraries.
CO2	Be able to understand concepts of management, functions, and principles scientific management.
CO3	Gain the knowledge of organizational structure
CO4	Have knowledge of selection and acquisition of books and other documents
CO5	Have knowledge of transitions / circulation of documents
CO6	Able to understand the art of maintenance and preservation of documents.
CO7	Experience the application of management theories in library management, organization or administration
CO8	Able to apply their knowledge to information acquisition, processing and retrieval at workplace.

Unit 1	:	Management Concept, definition and scope, Management styles and approaches, Principles and functions of management, Principles of Scientific Management.	08hrs
Unit 2	:	Organizational structure: Principles of Organizational structure, Organizational structure of Library and Information Centres	08hrs
Unit 3	:	Collection development: Types of documents and selection and acquisition: Tools, Procedures and Policies, Problems of Collection development	08hrs
Unit 4	:	Technical Processing and Preparation of documents for use: shelving, Circulation work, Methods of book circulation- charging and discharging systems.	06hrs
Unit 5	:	Maintenance, Preservation and Conservation of Information Resources- procedure policies and techniques, stock verification, Binding and weeding out	08hrs
Unit 6	:	Library committee, Library statistics, Annual reports: Compilation, Contents and style, Library rules and regulations.	08hrs
Unit 7	:	Records Management Concepts and Issues.	04hrs

References:

1. Application of Management Technique to Library and Information Systems, 12th IASLIC Conference, Roorkee, 1979
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LSH452: INFORMATION TECHNOLOGY – II

Objectives:

- To introduce the students with the library automation and related issues.
- To study Library Software Packages
- To familiarize students with library automation
- To understand infrastructure requirements for library automation-hardware, software and skilled manpower
- To understand current trends in Information Technology
- To study information technology application to Library and Information work
- To study retrospective conversion of documents.

Course Outcome (CO):

CO1 Able to understand basic concept of library automation; need, areas, and strategies for library automation.
CO2 Able to understand the infrastructure requirements like hardware, software, and skilled manpower for implementing automation in libraries
CO3 Gain the knowledge and its features and functions of housekeeping tools like acquisitions, cataloging and also knowledge of their file and data structures of library automation.
CO4 Knowledge of housekeeping operators of circulation, serials control, OPAC and Web OPAC.
CO5 Know the process, strategies and techniques of retrospective conversion of records.
CO6 Hands on experience of library automation software packages like SOUL, Libsys, KOHA, NewGenLib, and e-Granthalaya.
CO7 Knowledge of current trends in IT and its application to library and information work.

Unit 1	:	Library Automation: Meaning and Definition, Need, Areas of Library Automation, Strategies for Library Automation.	08hrs
Unit 2	:	Infrastructure Requirements for library automation- Hardware, Software, Humanware.	06hrs
Unit 3	:	Automations of Housekeeping features- Acquisitions, cataloging, file and data structures.	08hrs
Unit 4	:	Automation of Housekeeping operators: Circulation and Serials Control, file and data structures, OPAC, Web OPAC.	08hrs
Unit 5	:	Retrospective conversion of records: Meaning Retrospective Conversion Process, Strategies and Techniques.	06hrs
Unit 6	:	Library Software Packages – Propretry– SOUL, Libsys, Open Source Software – KOHA, NewGenLib, e-Granthalaya, Evaluation of Library Automation Software.	08hrs
Unit 7	:	Current Trends in Information Technology and Application to Library and Information work	06hrs

Reference:

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2. Burns, A : New Information Technology. 1984.
3. Edmunda, R A : Prentice Hall Encyclopedia of Information Technology, Essential Guide dBase plus in Libraries. 1988.
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LSP453: INFORMATION PROCESSING: CLASSIFCATION - II (PRACTICE)

Objectives:

- Construction of Class Numbers for documents of different disciplines / subjects using Universal Decimal Classification
- Introduction to the use of the UDC
- To familiarize students with UDC
- To understand basic features and syntax of UDC
- To understand organization of classes of UDC
- To construct of class numbers using UDC
- To familiarize common auxiliary tables
- To understand connecting signs of UDC

Course Outcome (CO):

CO1 Apply theoretical knowledge of classification into practice
CO2 Knowledge of using the analyzing core thought content of modes of formation of subjects
CO3 Assess the suitability of UDC as a scheme of classification for arranging library materials
CO4 Gain the knowledge of constructing classifications numbers for different documents.
CO5 Understating of recent trends and mode of classifying e-resources.
CO6 Knowledgeable and capable of using UDC scheme of classification at their workplace.

CO7 Understand with reference to its structure, notation, auxiliaries, synthetic devices and alphabetical index.

Classification of Books and other documents according to the latest edition of UDC 64hrs
(Each Student shall maintain practical record and submit the same at the time of practical examination)

LSP454: INFORMATION TECHNOLOGY – I (PRACTICE)

Objectives:

- To train students in using Information Technology tools and techniques
- To train the students with the library automation and related issues.
- To provide basic knowledge of computer and its application in managing various activities of library system.
- To familiarize students with library automation, and retrieval process.
- To familiarize students with Integrated Library System software (ILS)
- To study Operation of computers and connecting the various components
- To provide hands on experience with Integrated Library System software (ILS)

Course Outcome (CO):

CO1 Able to understand and work on experience with IT products and services
CO2 Have the knowledge of working with computers hardware, software and CLI and GUI operating systems.
CO3 Gain the knowledge of word processing and power point presentation application.
CO4 Knowledge of spread sheet tools especially MS excel used for analysis and graphical representation of data.
CO5 Be trained to work with library automation and management tools of SOUL and KOHA
CO6 Overall knowledge of library automation and its operations parts using different types of software.
CO7 Gain knowledge of both system software and application software related to library automation and management.

Unit 1	:	Command line operating systems UNIX	09 hrs
Unit 2	:	GUI based operating systems – Windows, Linux.	09 hrs
Unit 3	:	MS –Word	09 hrs
Unit 4	:	MS-Excel	09 hrs
Unit 5	:	MS-PowerPoint	09 hrs
Unit 6	:	SOUL	09 hrs
Unit 7	:	KOHA	09 hrs

Soft Core

LSS455: INFORMATION SOURCES AND SERVICES

Objectives:

- To understand the concept of information sources.
- To study documentary and non-documentary sources of information.
- To familiarize students with Print and Electronic versions of information sources
- To understand the Primary, secondary and tertiary information sources.
- To know the library and information services in academic libraries.
- To study various aspects of information sources.
- To train students in handling information resources.

Course Outcome (CO):

CO1 Understand the basic concept, importance, characteristics, functions, and evolutions of both print and non-print sources of information.
CO2 Gain the knowledge of primary, secondary and tertiary sources of information
CO3 Know the categories of information like documentary and non – documentary sources as well as the human and institutional sources of both print sources and e-resources.
CO4 Clearly understand the major print and electronic resources related to primary sources of information.
CO5 Understand the important secondary sources of both print & electronic versions information sources.
CO6 Trace the relevant tertiary sources of both print & electronic sources of information.
CO7 Know the different non-documentary sources of human and institutional sources of information

Unit 1 **:** Information Sources: Meaning, Definition, importance, Characteristics, Functions, evolutions -both print and non-print. **06hrs**

Unit 2 **:** Types of Information Sources: Primary, Secondary and Tertiary sources of information; Documentary Sources and Non –Documentary Sources, Human and Institutional sources; Non–print and Electronic sources. **08hrs**

Unit 3 **:** Primary Sources (Print and Electronic Versions): Periodicals, Technical reports, Patents, Standards and Specifications, Theses and Dissertations, Conference and Seminar proceedings, Trade literature. **08hrs**

Unit 4 **:** Secondary Sources (Print and Electronic Versions): Dictionaries, Encyclopedias, Yearbooks and Almanacs, Biographical sources, Bibliographies, Geographical sources, Current sources, Statistical, information sources, Handbooks and Manuals. **08hrs**

Unit 5 **:** Tertiary Sources (Print and Electronic Versions): Directories, Guides to reference sources, Bibliography of bibliographies, Monographs, Union catalogues, Textbooks. **06hrs**

Unit 6 : Non documentary Sources and their Electronic Versions: Human Sources: Technological gatekeepers, invisible colleges, consultants, experts/resource persons, personal home pages, representatives of firms, and others; Institutional / Organisational Sources: Government ministries and departments, R& D organizations, learned societies, publishing houses, archives, data banks, information analysis centers, referral centers, Institutional web sites. Current Trends in Information Sources: CD-ROM, Internet resources, Discussion Forums and Information Gateways. **08hrs**

Unit 7 : Library and Information Services in Academic Libraries: Reference Service/Referral; Library Use and Information Literacy; Documentation and Information Services – National and International; Current Awareness and SDI Service; Abstracting and Indexing Services; Information Product Development Services; Document Delivery Services **06hrs**

References:

1. Davinson Donald: Reference Service, London Clive Bingley,1980
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Open Elective

LSE456: REFERENCE/INFORMATION SOURCES

Objectives

- To familiarize students with the meaning, definition, use and implications of Information Sources
- To study the primary, secondary tertiary sources of information sources
- To understand the electronic information sources
- To study human sources of information
- To know the current trends in information sources
- To study various aspects of information sources.
- To train students in handling information resources.

Course Outcome (CO):

CO1 Understand the concept, types and impotence of information / reference sources.
CO2 Clearly understand the major information resources related to primary sources of information.
CO3 Understand the important secondary sources of information like dictionaries, encyclopedias, handbooks and manuals, etc.
CO4 Understand the relevant tertiary sources of information like directory of directories, bibliography of bibliographies, union catalogues, guides to subject literature, and evaluation of both print and electronic information source.
CO5 Know the different non-documentary sources like human and institutional sources of information.
CO6 Understand the concept, types of e-journals, e-books, e-theses, e-newspapers, blogs and wikis. Online Dictionaries and Encyclopedias of e-resources.
CO7 Clearly understand the current trends in Information Sources different types of library and information services especially in academic libraries

Unit 1 **:** Reference Sources: Meaning, Definitions and types; Information Services: Meaning, definition and Importance. Types of information services. **06hrs**

Unit 2 **:** Primary Sources: Periodicals, Conference Proceedings, Technical Reports, Patents, Standards and Specifications, Trade Literature, Theses and Dissertations, Reprints, Preprints and Monographs. **06hrs**

Unit 3 **:** Secondary Sources: Dictionaries, Encyclopedias, Handbooks and Manuals, Style Manuals, Bibliographies, Geographical Sources, Biographical Sources, Yearbooks, Almanacs, Directories, Library catalogues, Union Catalogues, Statistical sources, Abstracting and Indexing sources in different disciplines. **12hrs**

Unit 4 **:** Tertiary Sources: Directory of Directories, Bibliography of Bibliographies, Union Catalogues, Guides to Subject Literature. Evaluation of Information sources: Print and Electronic **06hrs**

Unit 5 : Non-documentary Sources: **08hrs**

a) Human Sources – Consultants, Experts, Extension Workers, Technology gatekeepers, Invisible Colleges, Information Brokers;
b) Institutional Sources – National and International agencies, Govt. Departments, R&D Organizations, Academic Institutions

Unit 6 : Electronic Information Resources: Meaning and Definitions, Types – E-journals, E-books, E-theses, E-newspapers, Blogs and Wikis. Online Dictionaries and Encyclopedias: Free and Proprietary. **08hrs**

Unit 7 : Current Trends in Information Sources: CD-ROM, Internet resources, Discussion Forums and Information Gateways. Information Search-types, On-line searching, search techniques. **04hrs**

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1. Grogan, Denis: Science and Technology, Ed.4. London, Clive Bingley, 1982
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III SEMESTER

Hard Core

LSH501: INFORMATION RETRIEVAL

Objectives:

- To study various methods and techniques of Information Retrieval and search strategies
- To understand the perspectives and significance of Information retrieval in the present context.
- To develop skill in information processing, organization and retrieval.
- To familiarize students with information retrieval techniques
- To study Bibliographic description
- To understand indexing concepts, theories, methods and importance
- To familiarize students with current trends in information retrieval

Course Outcome (CO):

CO1 Understand the objectives, components and functions of information processing and retrieval systems

CO2 Gain the knowledge of information search; search techniques; search strategies; and other search formations.

CO3 Clear understand the concepts, theories, methods and importance indexing languages, thesauri and different subject headings

CO5 Understand the different kinds indexing systems like Pre-Coordinate and Post coordinate, PRECIS, Chain Indexing, POPSI, KWIC, UNITERM Indexing, Citation indexing etc.

CO6 Clear understanding the evaluation of Indexing Systems and criteria for evaluation of ASLIB, MEDLARS, STAIRS, SMART, TREC, etc.

CO7 Knowledge of bibliographic description standards and format of ISBD, MARC 21, ISO 2709 and CCF.

Unit 1	:	Information Processing and Retrieval: Basic concepts, meaning and definition, Retrieval Process: objectives, components and functions of IRS.	**08hrs**
Unit 2	:	Information search: objectives of information search, search techniques, information search strategies, pre search interview, search logic.	**06hrs**
Unit 3	:	Indexing: Concepts, theories, methods and importance. Indexing languages: Vocabulary control, semantics and syntactics. Thesauri and Subject Headings – Design and construction	**08hrs**
Unit 4	:	Indexing Systems: Pre-Coordinate and Post coordinate. PRECIS, Chain Indexing, POPSI, KWIC, UNITERM Indexing, Citation indexing.	**06hrs**
Unit 5	:	Evaluation of Indexing Systems criteria for evaluation: Recall and Precision, Coverage and Currency, ASLIB, MEDLARS, STAIRS, SMART, TREC, Evaluation studies.	**08hrs**

Unit 6 : Bibliographic Description: Concept, Historical Development, Standards for Bibliographic record format- ISBD, MARC 21, ISO 2709 and CCF, International Bibliographical Control, Universal Bibliographical Control, Role of International Organizations, Standards and Cooperation. **08hrs**

Unit 7 : Trends in information retrieval-development, search and retrieval, full text retrieval user information. **06hrs**

References:

1. A course in Information consolidation: a handbook for education and training in analysis, synthesis and repackaging of Information. General Information Programme and UNISIST, UNESCO, PGI, Paris. 1986.
2. Alberico, R. and Micco M.(1990). Expert systems for reference and Information retrieval. West Port : Meckler.
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LSH502: MANAGEMENT OF LIBRARIES AND INFORMATION CENTRES-II

Objectives:

- To create understanding about Human Resource Management
- To understand the budgeting techniques
- To familiarize students with marketing of Information products and services
- To understand public and human relations in library management
- library building, furniture and equipments
- To understand Performance evaluation of librarian and information centers and services
- To study Financial management of libraries

Course Outcome (CO):

CO1 Able to understanding the planning of library and information centres and its different kinds and steps.
CO2 Able to know the value of HRM; able to understanding the motivation, training, analysis, specification, selection, and recruitment of job.
CO3 Familiar with the financial management and different type and techniques of budget.
CO4 Able to understand the planning, design and maintenance library building, furniture and equipment.
CO5 Familiar with management tools and techniques for assessment LICs and their services; and also able to understanding the TQM, PERT, CPM, and SWOT analysis.
CO6 Able to understand application of marketing and public relations concepts to library services.
CO7 Familiar with the public and human relations in library management.

Unit 1 : Planning of Library and Information Centres, Planning: Macro Planning and Micro Planning. Steps in planning Library and Information Centres. **08hrs**

Unit 2 : Human Resource Management: Personnel management in LIC: job Analysis: Job Description, and job specification, Selection and recruitment, Procedures and methods, Motivation, Training and Development, performance appraisal, Qualities of Librarians. **08hrs**

Unit 3 : Financial Management: Sources of Finance, Resource mobilization Budget, Types of Budget, Budgeting Techniques, PPBS. Zero based budgeting, Budgeting control, cost benefit analysis. **08hrs**

Unit 4 : Library Building, Furniture and Equipment: planning, Design and Maintenance. **06hrs**

Unit 5 : Performance evaluation of Librarian and Information Centres and Services: Management tools and Techniques for Assessment Library and information centres and their services: Total Quality Management (TQM), Programme Evaluation Reviewing Technique (PERT), Critical Path Method (CPM), Strength Weaknesses Opportunities and Threat (SWOT) analysis. **08hrs**

Unit 6 : Marketing of Information products and services: Meaning, Definition, Need, Market segmentation, Positioning, Market Mix, 4P's - Product, Price, Place, Promotion, Marketing Audit, Role of Librarian in Marketing of LIS. **08hrs**

Unit 7 : Public and Human Relations in Library Management. **04hrs**

References:

1. Application of Management Technique to Library and Information Systems, 12th IASLIC Conference, Roorkee, 1979
2. Chatterjee, AK: Introduction to Management: Its Principles and Techniques, Kolkatta, World Press.
3. Davar, RS: The Management process, 1982
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LSH503: RESEARCH METHODS IN LIBRARIANSHIP

Objectives:

- To familiarize students with concepts and types of research
- To study research design
- To know the research techniques and tools
- To understand the research methods and process
- To familiarize students with the fundamentals of Bibliometrics, Scientometrics, Informetrics and Webometrics
- To understand data analysis and interpretation
- To develop the skills of report writing

Course Outcome (CO):

CO1 Familiar with theory and practice of research and its methodology.
CO2 Familiar with identifying research problems and doing subject literature research.
CO3 Aware of developing research design, sample size and research instrument for data collection.
CO4 Understanding the mode of data collection and data analysis
CO5 Knowing on using statistical tools and techniques for data analysis and interpretation of research findings
CO6 Aware of methods of presenting and reporting research findings.
CO7 Knowing fundamentals of Bibliometrics, Scientometrics, Informetrics and Webometrics

Unit 1 **:** Research: Concept, Meaning, Need and Process of Research; Types of Research – Fundamental and Applied including inter disciplinary and multidisciplinary approach; Role of Research in the Development of Scholarship. Ethics in research. Areas of research in LIS. **08hrs**

Unit 2 **:** Research Design: Conceptualization and Operationlisation; Types of Research Design; Identification and Formulation of problem; Hypotheses; Nominal and Operational Definition; Designing Research Proposal; Ethical aspects of Research; Literature search – print, non-print and electronic sources. **08hrs**

Unit 3 **:** Research Methods: Scientific Method; Historical Method; Descriptive Method; Survey Method and Case Study Method; Experimental Method and Delphi Method. **06hrs**

Unit 4 **:** Research Techniques and Tools: Questionnaire; Schedule; Interview; Observation; Scales and check lists; Library and Record and Reports; Sampling Techniques. **06hrs**

Unit 5 **:** Data Analysis and Interpretation: Descriptive Statistics – Measure of Central Tendency; Co-relation, Mean, Mode, Median, Tabulation and Generalization; Measures of dispersion, Variance and covariance, Standard Deviation; Graphical presentation of data – Bar, pie, line-graphs, Histograms; Regression – linear and non-linear; Chi Square Test; Sociometry; Statistical Packages – SPSS and its variations. **08hrs**

Unit 6 : Bibliometrics, Scientometrics, and Informetrics: Concept and Definition; Bibliometric Laws: Bradford's, Zipf's, Lotka's; Bibliographic Coupling; Obsolescence; Citation Analysis; Citation Studies; Informetrics; Scientometrics, Webometrics. **08hrs**

Unit 7 : Research Reporting: Structure and components, Style, Contents; Guidelines of Research Reports; Style Manual – Chicago – MLA-APA; E-Citation and Methods of Research Evaluation. **06hrs**

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Soft Core

LSP504: INFORMATION PROCESSING: CATALOGUING -II (PRACTICE)

Objectives:

- Preparing Catalogue Entries (Main, Added and Reference Entries) for Non-Book Materials using Anglo American Cataloguing Rules -2 revised edition. Assigning Subject Headings (Using at least one Standard Subject Heading)
    - Cartographic Materials
    - Manuscripts
    - Graphic Materials
    - Printed Music
    - Sound Recordings
    - Motion Pictures & Video Recordings
    - Micro Forms
    - Electronic Resources

Course Outcome (CO):

CO1 Get hands-on training to advanced mode of cataloguing complex reading materials available in different formats.
CO2 Clear understanding the preparation of cataloguing for non book materials according to the latest edition of AACR/RDA
CO3 Gain knowledge of applying various cataloguing codes for non book materials.
CO4 Knowledge and skill of using different formats and standards that can be used for the cataloguing the resources
CO5 Get hand on experience of the different non book materials forms.
CO6 Understating of current trends in cataloguing of non-book materials
CO7 Hands-on training to catalog different type and formatted documents in library.

Cataloguing of Non Book materials according to the latest edition of AACR/RDA **64hrs**

LSP505: WORK EXPERIENCE AND LIBRARY TOUR

Objectives:

- **Work experience:** The M.L.I.Sc. students shall work 2 (two) hours per week in the library identified by the department and submit the work experience report before the commencement of theory examinations.
- Any library work experience serves the purpose of both – the student as well as the library. It is supposed to add value to both the parties. These objectives are:
    - To increase the knowledge and skills of recent graduates;
    - To upgrade their skills in a specific area of information service;
    - To train them in order to boost their efficiency for crucial department/section;
    - To train them to adopt to the existing working conditions in the home library
- **Library Tour:** There shall be a library tour, which is compulsory and student has to submit a tour observation report. Library tour will be conducted during mid-semester vocation falling between II and III semester. Each student shall submit a library tour report prepared under the guidance of the teacher and submit the same before the commencement of the theory examinations.

Course Outcome (CO):

CO1 Gain practical experience of working in real libraries
CO2 Validate or compare their classroom learning in real library activities
CO3 Gain knowledge of activities performed in different type of libraries like university, professional, research and public libraries.
CO4 Will develop analytical skills and knowledge are enhanced by practical experience.
CO5 Gain more knowledge enabled to critically analyze the library policies, functions, activities, services and process of different libraries
CO6 By visiting all kinds of library and information centers in other states or countries, they can see directly what they have learned and follow in their future.
CO7 Fulfillment, the course allows students to visit some real libraries and study the functions and services.

a) Work experience: The M.L.I.Sc. students shall work 2 (two) hours per week in the library identified by the department and submit the work experience report before the commencement of theory examinations. **32hrs**

b) There shall be a library tour, which is compulsory and student has to submit a tour observation report. Library tour will be conducted during mid-semester vocation falling between II and III semester. Each student shall submit a library tour report prepared under the guidance of the teacher and submit the same before the commencement of the theory examinations.

Open Elective

LSE506: REFERENCE/INFORMATION SERVICES

Objectives:

- To familiarize students with the meaning, definition, use of Reference/Information Services
- To know the various types of information services
- To study the activities of National and International information systems
- To study Information Needs, use and user studies
- To understand user education and techniques methods of user education programme
- To study the Knowledge skills and Techniques required for Professionals to deal with Print, Non-Print, and electronic forms of Information System and Web Based Services
- To understand the indexing and abstracting services

Course Outcome (CO):

CO1 Will be familiar with the concept need and importance reference / information services and the planning of reference services.
CO2 Familiar with the different types of library services like CAS, SDI, DDS, Translation and other services.
CO3 Will familiar with indexing and abstracting services.
CO4 Will understand the information users and their information needs, categories of Information users and Information Seeking Behavior.
CO5 Will gain the knowledge of user education, objectives technique and methods of user education programs.
CO6 Will study the information systems and programmes like NISCAIR, DESIDOC, INFLIBNET, MEDLARS, INSPEC, BIOSIS, CAS, ISI.
CO7 Will solve problems of libraries information centres, knowledge centres and professional requirement for to deal with print and electronic information system and services.

Unit 1 **:** Information Services: Definitions, Need, Importance. Reference Service: Concept, Definition and types, Reference interview, planning of reference services. **08hrs**

Unit 2 **:** Current Awareness Services (CAS) & Selective Dissemination of Information (SDI) services, Translation Services and Document Delivery Services – concept, definition, types and planning. **08hrs**

Unit 3 **:** Indexing Services, abstracting services-concept, definition, types and planning. **08hrs**

Unit 4 **:** Information Users and their Information Needs, Categories of Information Users Information Needs and Information Seeking Behavior, User Studies: Methods. **08hrs**

Unit 5 **:** User Education, Objectives of user education, Technique and methods of user education programme. **06hrs**

Unit 6 **:** Study of Information systems and Programmes: NISCAIR, DESIDOC, INFLIBNET, MEDLARS, INSPEC, BIOSIS, CAS, ISI. **08hrs**

Unit 7 **:** Knowledge skills and Techniques required for Professionals to deal with Print, Non-Print, and electronic forms of Information System, Web Based Services. **04hrs**

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IV SEMESTER

Hard Core

LSH551: INFORMATION SYSTEMS AND SERVICES

Objectives:

- To familiarize students with the meaning, definition, use and implications of Information Systems
- To understand the structure and development of Information Systems
- To study the various components of information systems
- To study the activities of National and International information systems
- To understand the resource sharing and networks
- To know the bibliographic service
- To understand the planning design and evaluation of information systems

Course Outcomes (CO):

CO1 Able define and describe structure, functions and components of information systems
CO2 Makes students to understand nature of reference and referral services and importance of resource sharing.
CO3 Clearly understanding of concept, importance and types of reference services
CO4 Know current awareness and selective dissemination of information services
CO5 Understanding of meaning and importance of resource sharing and national information network centres that are involved in resource sharing\
CO6 Understand to generate subject bibliographies and provide them to needed users
CO7 Have the knowledge of National Documentation centres and their role in information services
CO8 Familiar with international agencies involved in provision of information services

Unit 1 **:** Information systems: Basic concepts, Meaning, Objectives and Functions. - Components of Information System: Structure, Functions and Services, Libraries, Documentation Centres, Information centres, Data centres, Information analysis centres, Clearing houses, Data banks, Data Curation centres, Museums, Memories, Institutional Repositories, Open Archives, Referral, Translation Centres, and Publishing Houses. **08hrs**

Unit 2 **:** Reference service: Types -Short and Long Range with examples. Reference process, Steps in providing reference services, Virtual Reference Desk (VRD), Management, technology and resources. Referral service. Reference Collection, Knowledge, Skills and Qualities of a Reference Librarian. **08hrs**

Unit 3 **:** Compilation of CAS and SDI, Indexing and Abstracting Bulletins, Translation Service. On-line Services: Alerting services-Listservs and Subject portals, FAQs - Developing FAQs -methods and techniques. Document Delivery Services -Needs and Importance, Types of Document Delivery Services. **08hrs**

Unit 4 **:** Resource Sharing and Networks: Consortia- Importance and objectives. Study of Information networks- OCLC, INFLIBNET, UGC-INFONET, DELNET, , and INDEST. - Information policies and programmes. Planning, Design and Evaluation of Information systems. **08hrs**

Unit 5 : Bibliographic Services -Importance, Types and its role in Information access and use Preparation of bibliographies, Trend Reports, State of the Art reports and Digests. **04hrs**

Unit 6 : National Documentation Centers and Information Systems: NISCAIR, DESIDOC, NASSDOC and SENDOC **06hrs**

Unit 7 : International Information Systems and Services: Identification, Features and Use: BIOSIS, INSPEC, ERIC, AGRIS, INIS and MEDLINE **08hrs**

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LSH552: INFORMATION TECHNOLOGY – III

Objectives:

- To study database design, development and management
- To know WINISIS and MS-Access
- To introduce the concept of digital library
- To understand the process of web programming, database connectivity
- To study the implications of Web technologies to library and information management.
- To understand internet tools and techniques
- To familiarize students with open sources library software

Course Outcomes (CO):

CO1 Familiarizing students with internet, design, development of DBMS, web design and digital library using metadata standards.
CO2 Skills for installing and customizing computer system application software like WINISIS,
CO3 Understanding of topology and requirements of computer networks and type for networks available for accessing information online
CO4 Knowledge of scripts and standards required for web design and programming.
CO5 Clear understanding of purpose, methods and cyber laws related to internet and its usage
CO6 Knowledge of computer hardware, software and other infrastructure required to develop digital library
CO7 Familiar with metadata and other web standards to create digital libraries and open sources software available for creating digital repositories

Unit 1 **:** Database: Design, Development and Management, Database Models, DBMS, RDBMS. Data mining and Data warehousing: Decision Support Systems (DSS) and Online Analytical Processing (OLAP). **06hrs**

Unit 2 **:** Study of WINISIS and MS-Access: System Overview, system Installation, Database Construction, Techniques, Menus, Tools and Creation of database **08hrs**

Unit 3 **:** Networks: Concept, Definition, Need, Uses. Network Topologies, Types of Networks LAN, MAN and WAN. Network Architecture, Network Protection and Security - TCP/IP, IPX. **06hrs**

Unit 4 **:** Web design: Web Server, Web hosting, using web graphics, medias, Design tools – HTML, XHTML, Dreamweaver, CSS, Javascripts. Website – types, Web standards. **08hrs**

Unit 5 **:** Internet: History, ISP, Internet Tools and Services, Electronic resources available on the Internet, WWW, E-Mail, Telnet, FTP, Internet Relay Chat. Search Engine, Gopher, Archie, Veronica, WAIS, Usenet/List Forum, PING, Web sites, Browser, Blogs, Semantic Web, Social Network, Cloud Computing, Regulation of Cyber Laws. **06hrs**

Unit 6 **:** Digital Librareis: Meaning, Definition, Functions, Scope; Infrastructure required for setting up a Digital Libraries – Hardware, Software and Human ware, Library Materials, Digital Materials; Advantages and Disadvantages of Digital Libraries. Institutional Repositories **08hrs**

Unit 7 **:** Digital Library Standards, Storage, Security and Open Source Software: Standards- MARC or MARC-21, Dublin Core Metadata, Z39.50. Storage-database and Security. Open source software like Greenstone, DSpace and Eprint, Digital Library Projects. **08hrs**

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LSP553: INFORMATION TECHNOLOGY – II (PRACTICE)

Objectives:

- To provide hands on experience with Networking and Internet
- To provide hands on experience with Internet tools and Services
- To provide hands on experience with Online Database searching
- To provide hands on experience with Web design and Web hosting
- To train students in using Information Technology tools and techniques
- To train the students with the digital library and related issues.

Course Outcome (CO):

CO1 Practicing session to get trained to work in computerized network environments.
CO2 Experience of creating databases using WINISIS and MS-Access
CO3 Working experience of different computer networks
CO4 Knowledge of using internet with clear understanding of cyber laws and other web standards
CO5 Skills of online database searching
CO6 Knowledge of web design and web hosting
CO7 Working experience of installing and working through open library software like Greenstone and D-Space

Unit 1	:	Creation of Database: CDSISIS / WINISIS	**10hrs**
Unit 2	:	Networking and Internet.	**10hrs**
Unit 3	:	Internet Tools and Services.	**10hrs**
Unit 4	:	Online Database searching.	**10hrs**
Unit 5	:	Web design and Web hosting.	**10hrs**
Unit 6	:	Greenstone.	**10hrs**
Unit 7	:	D-Space.	**02hrs**

LSP554: DISSERTATION

Objectives:

- To determine mode and methods for primary dTo familiarize students to formulate research questions and statement of problem
- To understand scientific method of literature research
- To design suitable research methods, determine sample size and design appropriate research instrument
- To determine mode and methods for primary data collection from the target population
- To know creation of database responses from respondents and decide about tools and techniques for data analysis.
- To understand methods of interpretation of results data analysis in a meaningful manner.
- To develop writing skills for presenting research findings through submission of dissertation, which will be evaluated for award of degree

Course Outcome (CO):

CO1 Apply theoretical knowledge on research methodology into practice.
CO2 ormulate research questions and statement of problem
CO3 Conduct literature research scientifically
CO4 Design suitable research methodology including sample size and research instrument to collect data
CO5 Understand the mode of data collection, creation responses database do carryout the data analysis
CO6 Apply suitable statistical tools and techniques for data analysis and interpretation of research findings

CO7 Understand the method of presenting and reporting research findings.

64hrs

- M.L.I.Sc. students shall have to choose a topic for dissertation and preliminary preparation be carried out under the guidance of a teacher during M.L.I.Sc. 3rd semester.

- M.L.I.Sc students shall have to submit the dissertation on the chosen topic, before the commencement of the theory examination of M.L.I.Sc. 4th semester.

Soft Core

LSS555: MANAGEMENT INFORMATION SYSTEM (MIS)

Objectives:

- To familiarize students with the concept and implications of Management Information System (MIS)
- To know fundamental issues of information systems
- To study various sources of information like organizations and databases.
- To familiarize students with concepts, types and infrastructure of knowledge management
- To study Information Systems planning
- To understand the quantitative methods and tools for analysis and decision making
- To understand the overall information needs of an organization

Course Outcome (CO):

CO1 Understanding of concept, meaning, function and components of Management information systems
CO2 Familiarizing students with of management information systems, sources related to organizational information, knowledge management and organizational information requirements.
CO3 Able know and analyze with information needs and requirements of organization
CO4 Familiar with management principles and applications on IT, organizational effectiveness and communications
CO5 Familiar with knowledge management systems and theit implications on information services
CO6 Familiar with methods of planning, designing and developing information systems.
CO7 Aware of standard models like DSS, ERP, OOPS to design information systems.
CO8 Knowing quantitative methods and tools for analysis and decision making.

Unit 1 : Introduction to fundamental issues of information systems (IS), MIS-concept, meaning and definitions, components and objectives of MIS. **08hrs**

Unit 2 : Understanding of the overall information needs of an organization: analysis of organization information requirements, and prioritizing IS project, Analysis of information needs, specification of system requirements, analysis of alternatives, design of alternatives. **08hrs**

Unit 3 : Overview of managerial applications of information technology (IT) to increase effectiveness of organizations, cooperative work, organizational competitive advantage and inter- organizational communication. **08hrs**

Unit 4 : Knowledge Management: Concept, Definition, Purpose of KM, Need and Scope, Historical Development, Role of KM, Impact on Society, Knowledge Management Approaches, Information Technology and Knowledge Management. Application of Knowledge Management in LIS centers, Role of Information Professionals in Knowledge Management. **08hrs**

Unit 5	:	Information Systems planning: Use of case methods in planning Information Systems.	**06hrs**
Unit 6	:	Decision Support Systems, ERP, state-of-the-art techniques for information systems specifications and design, Real- time structured analysis and design, and object- oriented analysis and design.	**06hrs**
Unit 7	:	Quantitative methods and tools for analysis and decision making.	**06hrs**

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LSS556: CONSERVATION AND PRESERVATION OF INFORMATION RESOURCES

Objectives:

- To familiarize students with the preservation and conservation of information sources
- To know evolution of writing materials
- To understand different types of library materials, their preservation
- To study various National Archival Initiatives of different countries
- To know Digital Preservation
- To study record management concepts and issues
- To understand hazards to library materials and their preservation

Course Outcome (CO):

CO1 Educating students on tools and techniques of preserving information sources making them are of legal issues while digitizing and digital preservation/archives.
CO2 Familiar with methods and process practiced to preserve important documents in libraries.
CO3 Knowing evolution of storage devices and materials used to record and preserve knowledge through ages till modern times.
CO4 Aware of hazards of library materials and modes used for their preservation.
CO5 Aware of Open Archive initiatives (OAI) and nature of information accessible through those open repositories.
CO6 Knowing about records management and ERM code of ethics for digital archives.
CO7 Knowing methods, tools, legal issues related digitization and digital preservation

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Unit 1 : Introduction to Concepts of Archiving, Preservation and Conservation. Need and significance of Archiving, Preservation and Conservation of Information Resources. **06hrs**

Unit 2 : Evolution of writing materials- Clay, papyrus, metallic plates, skin, parchment, vellum, palm leaves, Palm leaves, Papyrus, Parchment and Vellum - Their history, nature, use as writing materials and their preservation. History of Paper making, Different types of paper and their nature. **08hrs**

Unit 3 : Different types of library materials, their preservation and maintenance: Paper Based materials - Book and Non Book materials, Library Binding, Binding Standards. Preservation and conservation of non-print materials: Microforms, AV records, Magnetic Plates, Tapes & Diskettes, Optical media, Magneto Optical Discs. **08hrs**

Unit 4 : Hazards to Library materials and their preservation: Environmental Hazards, Biological Hazards and Humanbeing as an enemy of library materials. Disaster Prevention and Recovery. **08hrs**

Unit 5 : To Study various National Archival Initiatives of different countries: NARA of US, Australian National initiatives, Public Archives of Canada. **06hrs**

Unit 6 : Records Management Concepts and Issues Involved. Information Resource Management., to include Electronic Resource Management Code of Ethics for Archivists. **08hrs**

Unit 7 : Digital Preservation: Tools and techniques, legal issues in digitalization. **06hrs**

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