ಮಂಗಳೂರು **MANGALORE** ವಿಶ್ವವಿದ್ಯಾನಿಲಯ **UNIVERSITY**

(Accredited by NAAC with 'A' Grade)

ಕ್ರಮಾಂಕ/ No. : MU/ACC/CR 09/2020-21/A2

NOTIFICATION

Sub: Revised syllabus of M.Lib.I.Sc. (Master of Library
& Information Science) programme.
Ref: Academic Council approval vide agenda
No.:ಎಸಿಃಶೈ.ಸಾ.ಸ.1:08 (2020–21) dtd 06.10.2020.

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The revised syllabus of M.Lib.I.Sc. (Master of Library & Information Science) programme which is approved by the Academic Council at its meeting held on 06.10.2020 is hereby notified for implementation with effect from the academic year 2020-21.

Copy of the Syllabus shall be downloaded from the University Website (www.mangaloreuniversity.ac.in)

REGISTRAR

To,

1. The Chairman, Dept. of M.Lib.I.Sc., Mangalore University, Mangalagangothri
2. The Registrar (Evaluation), Mangalore University.
3. The Chairman, PG BOS in M.Lib.I.Sc., Mangalore University.
4. The Asst. Registrar (ACC), O/o the Registrar, Mangalore University
5. The Superintendent (ACC), O/o the Registrar, Mangalore University
6. Guard File.

MANGALORE UNIVERSITY

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

Syllabus

Master of Library & Information Science (M.Lib.I.Sc.)

(Two Years – Four Semesters)

Under
Choice Based Credit System (CBCS)

From the academic year 2020 - 2021 onwards

The Department of Library and Information Science was established in the year 1982. It has conducted one-year Bachelor of Library and Information Science (B.L.I.Sc.) course from 1982 to 1996 and one year Master of Library & Information Science (M.Lib.I.Sc.) course from 1990 to 1997. Integrated two years M.Lib.I.Sc. course was introduced in 1996. The Department also offers doctoral (Ph.D.) programme, and has so far produced 56 (Fifty six) doctorates. It has been continuously revising and updating the syllabus incorporating the latest and recent developments in the thrust area of Information and Communication Technology (ICT), Information Technology, E-Resources and Services in the discipline of Library and Information Science from time to time.

The Department Mission is to;
- prepare library and information professionals who meet the challenges of contemporary librarianship in the knowledge society of the networked era.
- the department has excellent infrastructure, facilities, and learning environment.
- the department has practice-led teaching supported by practice-led learning.
- on the hand training and learning in online and offline resources, computer, internet, and latest library software training facilities.
- exposure to the most advanced techniques in the field of librarianship.
- the department has highly qualified, experienced and dedicated teaching faculty.

Thrust Areas of Research:

Research is being conducted in the areas of:
- Digital libraries,
- E-Resources and services,
- Information Communication Technology (ICT)
- Information literacy
- Information sources and services,
- Knowledge organization and management
- Metric studies,
- User studies, etc.
- Web technologies

Programmes Offered

- Two years M.Lib.I.Sc. (Master of Library & Information Science) Programme

- Ph.D.

Note: Specification of degrees as per UGC notification dated March 2014 published in the Gazette of India, July 5th, 2004 (Part III section 4)

Program Learning Outcomes

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 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 discipline:

1) They study the foundations and principal ideas of the discipline, and they are 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 Mangalore 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.

Programme Specific Outcome

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 and its role in social transformation.

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

Programme Structure

FIRST SEMESTER

Course code	Title of the Course	Scheme of examination						
		IA	Univ. Exam.	Total Marks	L	T	P	Credit Value
Hard Core								
LSH401	Foundations of Library and Information Science	30	70	100	2	1	0	3
LSH402	Fundamentals of Computer	30	70	100	2	1	0	3
LSH403	Knowledge Organization: Classification	30	70	100	3	1	0	4
LSH404	Information Processing: Cataloguing	30	70	100	3	1	0	4
Soft Core								
LSP405	Knowledge Organization: Classification–I (Practice)	30	70	100	0	1	3	4
LSP406	Information Processing: Cataloguing–I (Practice)	30	70	100	0	1	3	4
	Total	180	420	600	10	6	6	**22**

SECOND SEMESTER

Course code	Title of the Course	Scheme of examination						
		IA	Univ. Exam.	Total Marks	L	T	P	Credit Value
Hard Core								
LSH451	Library Automation	30	70	100	3	1	0	4
LSP452	Knowledge Organization: Classification–II (Practice)	30	70	100	0	1	3	4
LSP453	Library Automation (Practice)	30	70	100	0	1	3	4
Soft Core								
LSS454	Information Sources	30	70	100	3	1	0	4
LSS455	Management of Libraries and Information Centres	30	70	100	3	1	0	4
	OR							
LSS456	Academic Library System							
	OR							
LSS457	Public Library System							
Open Elective								
LSE458	Reference / Information Sources	30	70	100	3	0	0	3
	Total	180	420	600	12	5	6	23

THIRD SEMESTER

Course code	Title of the Course	IA	Univ. Exam.	Total Marks	L	T	P	Credit Value
					Credit Patten			
Hard Core								
LSH501	Information Retrieval	30	70	100	3	1	0	4
LSH502	Methods in LIS Research	30	70	100	3	1	0	4
LSP503	Information Processing: Cataloguing–II (Practice)	30	70	100	0	1	3	4
LSP504	Information Sources (Practice)	30	70	100	0	1	3	4
Soft Core								
LSS505	Conservation and Preservation of Information Resources	30	70	100	3	1	0	4
	OR							
LSS506	Information Literacy							
	OR							
LSS507	Special Library System							
Open Elective								
LSE508	Electronic Information Resources and Services	30	70	100	3	0	0	3
	Total	180	420	600	12	5	6	23

FOURTH SEMESTER

Course code	Title of the Course	IA	Univ. Exam.	Total Marks	L	T	P	Credit Value
					Credit Patten			
Hard Core								
LSH551	Web Technology	30	70	100	3	1	0	4
LSP552	Methods in LIS Research (Practice)	30	70	100	0	1	3	4
LSP553	Web Technologies (Practice)	30	70	100	0	1	3	4
LSP554	Dissertation and Viva Voce	30	70	100	0	1	3	4
Soft Core								
LSS555	Information Systems and Services	30	70	100	3	1	0	4
LSS556	Practical Experience / Internship and Library Tour	30	70	100	0	0	4	4
	Total	180	420	600	6	5	13	24

Total Credits of all the semesters

First Semester	22
Second Semester	23
Third Semester	23
Fourth Semester	24
Total	**92**

FIRST SEMESTER

Hard Core

LSH401: FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE

Learning Objectives:

- To introduce the students to 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 of 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 science profession.

Course Outcome (CO):

CO1   Gain a clear understanding of LIS as professional education, its values, and philosophies that govern the activities in the practicing world;

CO2   Obtain a proper understanding of the functions and services of various types of libraries;

CO3   Differentiate functions and activities between different types of libraries;

CO4   Gain knowledge about different library legislation, Acts, IPR, and copyright;

CO5   Understand the activities, roles, and responsibilities of different 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 libraries; - Role of libraries in social, cultural, educational and scientific technical development; - Information society: Data, information, and knowledge, concept, meaning and features; - Development of libraries in India with special reference to Karnataka; - Different types of libraries and their functions and services.	08hrs

Unit 2	:	**Five Laws of Library Science:**	06hrs
		− Implications of five laws in library and information science.	
Unit 3	:	**Library Legislation**: - Need, purpose and features; - Library legislation in India - Problems and prospects; - Public library Acts in India. - Karnataka public library Act of 1965. - Press and registration Act and delivery of books (public libraries) and newspaper Act, 1954 and 1956. - Copyright act and Intellectual Property Rights (IPR). - Right to Information Act.	08hrs
Unit 4	:	**Library and Information Science Profession**: − Attributes of a profession; − Librarianship as a profession; − Professional ethics and qualities; − LIS education and − LIS research.	08hrs
Unit 5	:	**Professional Associations**: − Objectives and functions; − Role of professional associations in library development; − State library association – KALA; − National library associations - ILA, IATLIS, IASLIC; − International library associations – IFLA, ALA, LA. **Promoters of Library and Information Services:** − National level – RRRLF; − International level – UNESCO.	10hrs
Unit 6	:	**Public Relations and Extension Activities:** − Concept, definition, and scope; − Facets and programmes; − Publicity and extension, and − Outreach activities.	08hrs
		Total	**48hrs**

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LSH402: FUNDAMENTALS OF COMPUTER

Objectives:

- To introduce the students to 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 the tools and techniques of DTP and graphics;
- To develop information technology skills;
- To understand the fundamentals of computer 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 peripheral devices;
CO3   Clear understanding of the system and application software;
CO4   Gain knowledge of scripts and standards for data inputs;
CO5   Knowledge of programming languages like machine and assembly languages;
CO6   Gain knowledge of file organization and multimedia technology;
CO7   Knowledge of graphical user interface and desktop publishing.

Unit 1	:	**Information and Communication Technology (ICT):**
		
		  – ICT: Concept, meaning, characteristics;
		  – Computers: Concept, types;
		  – Generations of computers.
			08hrs

Unit 2	:	**Computer Hardware**:
		
		  – Components of a computer;
		  – Basic units of computer – arithmetic/logic unit, control unit, input; unit, output unit, and memory unit;
		  – Internal and external storage devices.
			08hrs

Unit 3	:	**Computer Software**:
		
		  – Types and categories;
		  – Systems software - Operating systems - MS windows, multi-user operating systems - Linux, Unix;
		  – Application software – word processing, spreadsheet, presentation packages, DTP;
		  – Free, open source and proprietary software.
			08hrs

Unit 4	:	**Data Representation**: – Bit, bytes; – Character encoding standards: ASCII, ISCII, UNICODE; – Understanding UTF-8, UTF-16 and UTF-32; – Number system: octal, decimal and hexadecimal; – Image encoding: Pixels – Multimedia and graphics.	08hrs
Unit 5	:	**Programming Languages**: – Machine languages, assembly languages, high-level languages; – Generations of programming languages; – Programming: steps in programming, basic programming languages: C, C++, HTML; – Artificial intelligence - expert system, natural language processing; – Flowchart.	10hrs
Unit 6	:	**File Organization**: – File formats: Documents, images, audio, video, and other concepts; – File organisation: Types and their advantages and disadvantages;	06hrs
		Total	**48hrs**

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LSH403: KNOWLEDGE ORGANIZATION: CLASSIFICATION

Objectives:

- To introduce the students to 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 of 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 knowledge of constructing classifications numbers for different documents;
CO6   Knowledge and skill of using different schemes of classification that can be used for organizing the resources;
CO7   Understating of recent trends and mode of classifying e-resources.

Unit 1	:	**Library classification**: – Definition, meaning, objectives, purpose and functions; – The general theory of classification; – Theory of knowledge classification and book classification. **Types of Library Classification:** – Enumerative classification schemes; – almost enumerative classification schemes; – Almost faceted classification scheme; – Faceted classification scheme; – Rigidly faceted classification scheme; – Freely faceted classification scheme.	08hrs

Unit 2	:	**Universe of Knowledge**: − Concept, meaning, and definition; − Structure and attributes; − Types of the subject: Simple, compound, and complex; − Modes of formation of subjects; − Universal knowledge as mapped in: DDC, UDC, CC.	08hrs
Unit 3	:	**Postulation approach to classification**: − Planes of work; − Canons of classification.	06hrs
Unit 4	:	**Basic Laws of Library Classification:** − Fundamental laws; − Canons; − Principles: Types of notation; − Fundamental categories; − Facet analysis and facet sequence; − Phase relations; − Common isolates.	10hrs
Unit 5	:	**Notational system**: − Meaning and definition, need, functions, qualities, and types, Call Number, mnemonics; − Hospitality in array and chain, devices, systems and specials, rounds and levels.	08hrs
Unit 6	:	**Study of selected schemes of classification:** − Dewey Decimal Classification, Universal Decimal Classification, Colon Classification; − Methodology for design and development of a scheme of library classification; − Recent trends in classification.	08hrs
		Total	**48hrs**

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LSH404: 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 a 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   Trained in the use of different cataloguing standards and formats to catalogue documents.

Unit 1	:	**Library Catalogue**: – Meaning, definition, need, purpose and functions; – History of catalogue codes; – Physical forms, inner forms; – Different kinds of entries.	10hrs
Unit 2	:	**Normative Principles:** – Laws; – Canons; – Principles of catalogue.	06hrs
Unit 3	:	**Subject Headings**: – Chain procedure; – Sears List of Subject Headings (SLSH); – Library of Congress Subject Headings (LCSH); – Medical Subject Headings (MeSH).	08hrs

Unit 4	:	**Study of major Catalogue Codes**;	08hrs
		 – AACR (latest edition); – RDA (Resource Description Access); – Filing rules and procedures; – Online Public Access Catalogue (OPAC), Web OPAC.	
Unit 5	:	**Standardization of Bibliographic Description**: – ISBD (M), ISBD(S), ISBD (NBM); – Bibliographic record format: UNIMARC, CCF, MARC21 , Z39.50, FRBR; – Metadata - definition and meaning, types and elements. – Metadata standards, DCMI, MODS.	10hrs
Unit 6	:	**Study of Cataloguing:** – Co-operative cataloguing; – Centralized cataloguing; – Union catalogue; – Current trends in cataloguing.	06hrs
		Total	**48hrs**

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Soft Core

LSP405: KNOWLEDGE ORGANIZATION: CLASSIFICATION – I (PRACTICE)

Objectives:

− To introduce the use of DDC;
− To analyze a work; direct approach; main classes, divisions and sections;
− To construct class numbers for using Dewey Decimal Classification latest edition;
− To use notes like "scope", "Inclusion", "Class here" "Optional provision" etc.;
− To know the synthetic features: Add from schedules;
− To use different Tables of DDC;
− To prepare call number with the construction of book numbers.

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 specific scheme of classification at their workplace;
CO4 Use it for number building;
CO5 Gain the knowledge of constructing clasmsifications numbers for different documents;
CO6 Knowledgeable and capable of using DDC scheme of classification at their workplace;
CO7 Understanding of recent trends and mode of classifying e-resources.

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

Unit 1		- Identification of Specific Subjects of the Documents.	06
Unit 2		- Classification of documents representing simple and compound.	14
Unit 3		- Classification of documents representing complex subjects.	14
Unit 4		- Use of Standard sub-division Table 1 in DDC.	08
Unit 5		- Use of Tables in DDC: From Table 2 to Table 6.	16
Unit 6		- Assigning Book Number.	04
		Total	**62hrs**

LSP406: INFORMATION PROCESSING: CATALOGUING – I (PRACTICE)

Objectives:

− To prepare catalogue entries (main, added and reference entries) for books (monographs) using Anglo American Cataloguing Rules - 2 revised edition and assigning;
− To derive Subject Headings to all entries (using at least one standard subject heading);
− To catalogue single personal authorship; joint authorship; works of more than three authors;
− To catalogue collaborative works; series; multivolume works; pseudonymous authors;
− To catalogue corporate authorship: a) government publications b) proceedings of conferences, seminars, workshops, etc. c) other corporate bodies: organizations, institutions, societies, etc;
− To catalogue uniform titles and serials.

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 Documents according to latest edition of AACR/RDA
(Each student shall maintain practical records and submit the same at the time of practical examination).

Unit 1	Preliminaries and study of Subject headings.	10 hrs
Unit 2	Single personal author.	12 hrs.
Unit 3	Shared responsibility with editorial direction.	10 hrs.
Unit 4	Series and multi volumes.	10 hrs.
Unit 5	Corporate bodies.	10 hrs.
Unit 6	Uniform titles and serials.	10 hrs.
	Total	**62hrs**

SECOND SEMESTER

Hard Core

LSH451: LIBRARY AUTOMATION

Objectives:

- To familiarize students with library automation;
- To study library software packages;
- To understand infrastructure requirements for library automation- hardware, software;
- To know the skilled manpower requirement;
- To study information technology application to library and information work;
- To study retrospective conversion of documents;
- To provide hands on experience with Integrated library system software (ILS).

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, purpose; – Advantages and disadvantages; – Areas of library automation,	08hrs
Unit 2	:	**Infrastructure Requirements for Library Automation**: – Hardware; – Software; – Manpower; – Cost, furniture, and maintenance.	06hrs

Unit 3	:	**Automations of Housekeeping Operations**: – Acquisitions; – Cataloguing; – Circulation; – Serials control; – OPAC/Web OPAC; – Subsystems and interface, file and data structure.	10hrs
Unit 4	:	**Standards and Specifications**: – ISO 2709, MARC 21, MARC XML, CCF, NACO, Z39.50, SRU/SW, SRU/SRW, NCIP (NISO), SIP2, SIP/NCIP, OAI-PMH, Unicode. **Security Technologies**: – Application of barcode, Radio-Frequency Identification (RFID), and Near-field communication (NFC) technology for library functions, smartcard technology. – Retrospective conversion of records.	10hrs
Unit 5	:	**Database**: – Design, development, and management; – Database models; – DBMS and RDBMS; – Data mining and data warehousing; – Decision Support Systems (DSS); – Online Analytical Processing (OLAP); data security.	06hrs
Unit 6	:	**Library Automation Software Packages**: – Proprietary Software – SOUL, Libsys. – Open Source Software – KOHA, NewGenLib. – Free Software e-Granthalaya, – Criteria for evaluation of library automation software.	08hrs
		Total	48hrs

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LSP452:   KNOWLEDGE   ORGANIZATION: CLASSIFCATION   -   II (PRACTICE)

Objectives:

- Construction of Class Numbers for documents of different disciplines / subjects using Universal Decimal Classification;
- To familiarize students with UDC;
- To understand basic features and syntax of UDC;
- To understand organization of classes of UDC;
- To construct 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
Each Student shall maintain practical record and submit the same at the time of practical examination

Unit 1		Introduction to the Structure of UDC.	06hrs
Unit 2		Use of Common Auxiliaries.	16hrs
Unit 3		Use of Special Auxiliaries.	12hrs
Unit 4		Construction of the Class numbers.	12hrs
Unit 5		Filing Order and Citation Order.	10hrs
Unit 6		Assignment of Book Numbers.	06hrs
		Total	**62hrs**

LSP453: LIBRARY AUTOMATION (PRACTICE)

Objectives:
- To impart practical training in the use of software to develop bibliographic databases;
- To give practical training in the use of library automation software;
- To familiarize students with open source library software;
- To introduce students computer and its components;
- To familiarize the students with various operating systems;
- To familiarize the students about information technology and its application to Library and Information work;
- To give basic knowledge about the software aspects and library automation packages.

Course Outcome (CO):
CO1   Able to understand and work on experience with IT products and services;

CO2   Have the knowledge of working with computer hardware, software and CLI and GUI operating systems;

CO3   Gain knowledge of word processing and power point presentation application;

CO4   Knowledge of spreadsheet tools, especially MS excel used for analysis and graphical representation of data;

CO5   Be trained to work with library automation and management tool KOHA;

CO6   Overall knowledge of library automation and the parts of its operations using different types of software;

CO7   Gain knowledge of both system software and application software related to library automation and management.

Each student shall compulsorily maintain the practical record and submit the same at the time of practical examination

Unit 1		Command-line operating systems Unix.	06 hrs
Unit 2		GUI based operating systems – Windows, Linux.	10 hrs
Unit 3		MS –Word.	10 hrs
Unit 4		MS-Excel.	08 hrs
Unit 5		MS-PowerPoint.	08 hrs
Unit 6		KOHA.	20 hrs
		Total	**62hrs**

Soft Core

LSS454: INFORMATION SOURCES

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 of 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, evaluation of information sources; – Types of information sources.	06hrs
Unit 2	:	**Primary Sources:** – Periodicals, research reports, conference and seminar proceedings, official publications, patents, standards, trade literature, and theses and dissertations.	06hrs
Unit 3	:	**Secondary Sources:** – Indexing periodicals, abstracting periodicals, bibliographies, treatises, monographs, textbooks; – Reference books: dictionaries, encyclopaedias, handbooks, manuals, yearbooks, almanacs, directories, biographical sources, geographical sources, statistical sources, current reference sources.	12hrs

Unit 4	:	**Tertiary Sources:**
		
		    − Directories;
		    − Guides to reference sources;
		    − Bibliography of bibliographies;
		    − Directory of directories;
		    − Union catalogues.
			08hrs

Unit 5	:	**Non-documentary Sources**: − Human sources: Information generators; information gatherers; information processors; information recorders; information disseminators; information retrievers; information technologists.	08hrs
		− 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.	

Unit 6	:	**Electronic Information Resources:**
		
		    − Meaning and definitions, types;
		    − E-journals, e-books, e-theses, e-newspapers, blogs, and wikis. online dictionaries and e-encyclopedias: free and proprietary, and other e-resources.
			08hrs

		Total	**48hrs**

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LSS455: MANAGEMENT OF LIBRARIES AND INFORMATION CENTRES

Objectives:

- To train the student in the techniques of librarianship and management of library;
- To 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 with basic principles, practices, procedures to manage different types of libraries;

CO2   Be able to understand concepts of management, functions, and principles of 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;

Unit 1	:	**Management Concept**:	06hrs
		- Concept, meaning, definitions and scope; - Management schools of thought; - Functions and principles of management; - Scientific management, principles of scientific management and their application to library and information centres; - Organizational structures.	

Unit 2	:	**Library House Keeping Operations:**	10hrs
		- Different sections of the library and information centre; - Book selection and acquisition: purpose, objectives, need, and functions, book selection tools and principles of book selection; - Technical processing; - Serial control, circulation control, maintenance etc.; - Stock verification: policies, procedures, and methods; - Online bookshops: identification, advantages, online book shops vs. traditional book shops. URLs; - Collection development and management policies, procedures; - Archiving – conservation - preservation, print, and non-print materials.	
Unit 3	:	**System Analysis and Design:**	08hrs
		- Concepts, meaning, and definitions; - Study of a system; - Performance evaluation of library and information centres; - Performance measurement; - Management of Information Systems (MIS): concept, use; - Project management, PERT / CPM; - Knowledge management.	
Unit 4	:	**Human Resource Management**:	08hrs
		- Human resource management: meaning, definitions, and functions; - Job description, analysis and job evaluation; - Recruitment procedures; - Motivation, delegation, and decision making; - Training and development; - Performance appraisal; - Leadership qualities.	
Unit 5	:	**Financial Management**:	06hrs
		- Sources of finance, resource mobilization budget, types of budget, budgeting techniques, PPBS; - Zero based budgeting, budgeting control, cost benefit analysis; - Marketing of information products and services: Meaning, definition, need, market segmentation, positioning, market Mix, 4P's - Product, Price, Place, Promotion, Marketing Audit.	

Unit 6	:	**Planning of Library and Information Centres**:	10hrs
		- Policies and procedures, MBO; - Building and space management; - Library statistics; - Library committees: importance, types, and functions; - Annual report: compilation, contents, and style; - Library building, furniture, and equipment; - Library rules and regulations.	
		Total	48hrs

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LSS456: ACADEMIC LIBRARY SYSTEM

Objectives:

- To encourage life-long learning among students to make them more knowledgeable in academic library system;
- To understand the concept, importance, functions, services and different types of academic libraries;
- To know the background of development of higher education in India;
- To acquaintance with different academic library network and consortia;
- To understand the collection development policy and technical processing;
- To provide an understanding of need, and different types of library and information service support to academic libraries;
- To study about the library finance, budgeting and infrastructure.

Course Outcome (CO):

CO1   Define the basic objectives of academic libraries;
CO2   Identify the differences in school, college and university libraries;
CO3   Explain the services and extension activities of academic libraries;
CO4   Understanding the historical development of higher education in India;
CO5   Awareness of different types of networks and consortia available at both national and international level;
CO6   Able to understand the collection development policy including technical processing;
CO 7   Gain the knowledge of library finance and infrastructure.

Unit 1	:	**Academic Libraries:** – Meaning, definition, importance, functions, services and types of academic libraries; – Users of academic libraries: types of users and their needs.	08hrs
Unit 2	:	**Higher Education and Libraries:** – History and development of higher education in India; – Role of UGC in the development of higher education; – Monitoring / accreditation agencies in India - NAAC, NBA; – Role of knowledge commission in higher education.	06hrs
Unit 3	:	**Networking and Resource Sharing in Academic Libraries:** - **Resource Sharing**: – Meaning, definitions, objectives, advantages, and disadvantages. - **Library Networks**: – Meaning, definitions, the study of various library and information networks – national: INFLIBNET, DELNET; international – CALIS, JANET, OCLC.	12hrs

		Library Consortia: – Meaning, definitions, objectives, types, study of various library consortia – national: FORSA, NKR, HELINET, CeRA , ICMR, SPACENET, e-ShodhSindhu and international: RLUK, ICOLC , EIFL, SANLIC, CONCERT, CARLI, etc. Study of academic library networks: OCLC, INFLIBNET, DELNET.	
Unit 4	:	**Collection Development in Academic Libraries:** – Types and character of academic library collection; – Acquisition of documents: selection, policy, and procedures, maintenance; – User participation in collection development. – Information technology impact. – Problems of collection development.	06hrs
Unit 5	:	**Library and Information Services in Academic Libraries:** – Reference service; – Referral service; – Current awareness service; – Selective dissemination information service; – Abstracting and indexing services; – Document delivery services; – Translation services; – Online services: Alerting services - Listservs and FAQ; – Extension activities.	10hrs
Unit 6		**Library Finance and Infrastructure:** - Academic library finance and budgeting; - Human resource management; - Library buildings and equipments.	06hrs
		Total	**48hrs**

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LSS457: PUBLIC LIBRARY SYSTEM

Objectives:

- To understand the meaning, origin, objectives and growth of public libraries;
- To know the various agencies involved in the promotion and development of public;
- To provide an understanding of need and different types of library and information service;
- To study about the library finance, budgeting and infrastructure;
- To know the need and different public library acts;
- To understand the requirements of infrastructure and sources of resource mobilization;
- To know the advances of information technology in public library.

Course Outcome (CO):

CO1 Recognize the importance, principles and role of public libraries in society;
CO2 Understanding the historical development of higher education in India;
CO3 Identify public library finance and delineate the public library movements;
CO4 Identify different sections of academic library and illustrates their functions;
CO5 Define the principles of collection development in academic libraries;
CO6 Describe the academic library services and networks;
CO7 Acquaintance with public library automation and networking.

Unit 1	:	**Public Libraries:** - Meaning, definition, origin, objectives, and functions of Public Libraries; - History and development of public libraries in India and other countries; - Role of public libraries in 21st century; - Role of government and non-government agencies in the development of public libraries; - Role of public library in literacy and mass education. - Public library users.	08hrs
Unit 2	:	**Managing Public Library:** - Public library administration; - Financial management of public libraries; - Recent development in public libraries in India; - Library & information policy: National and international.	08hrs

Unit 3	:	**Public Library Services:**	08hrs
		– Planning and organization of various types of information services to the different categories of users including the physically and mentally challenged persons and special groups: women and children; – Rural library services; need and importance; library users in rural areas, library services to rural public, library publicity, exhibition, seminar, book talks, A.V. programs, mobile library services; user awareness programmes.	
Unit 4	:	**Organisations Involved in the Development of Public Library:** – Role of national and international associations and organizations in the promotion of public Libraries; – Raja Ram Mohan Roy library foundation, UNESCO, IFLA etc.; – Internet public library.	08hrs
Unit 5	:	**Public Library Legislation in India**: - Study of public library legislation: need and importance; - An overview of public library acts in UK, USA, and other countries; - Public library acts in different states with emphasis on Karnataka State Public Library Act, 1965.	08hrs
Unit 6	:	**Automation & Resource Sharing:** - Networking, integrated public library system; - Library automation: Automating the house-keeping services in various sections in the public libraries; - Library services to special groups of people including physically handicapped, mentally challenged, Visually impaired, prisoners and children; - Role of National Mission for Manuscripts (NMM) on digitization of manuscripts and rare documents.	08hrs
		Total	**48hrs**

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LSE458: 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 importance 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 sources;

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	:	**Information Sources:** − Meaning, definition, importance, characteristics, functions, criteria for evaluation of information sources; − Types of information sources.	06hrs
Unit 2	:	**Primary Sources**: − Periodicals, research reports, conference and seminar proceedings, official publications, patents, standards, trade literature and theses and dissertations.	06hrs

Unit 3	:	**Secondary Sources**: – Indexing periodicals, abstracting periodicals, bibliographies, treatises, monographs, textbooks; – Reference books: dictionaries, encyclopaedias, handbooks, manuals, yearbooks, almanacs, directories, biographical sources, geographical sources, statistical sources, current reference sources.	12hrs
Unit 4	:	**Tertiary Sources:** – Directories; – Guides to reference sources; – Bibliography of bibliographies; – Directory of directories; – Union catalogues.	08hrs
Unit 5	:	**Non-documentary Sources**: – Human sources: Information generators; information gatherers; information processors; information recorders; information disseminators; information retrievers; information technologists;	08hrs
		– Institutional / organisational sources: government ministries and departments, R & D organizations, learned societies, publishing houses, archives, data banks, information analysis centres, referral centres, institutional web sites.	
Unit 6	:	**Electronic Information Resources:** – Meaning and definitions, types – E-journals, e-books, e-theses, e-newspapers, blogs, and wikis, online dictionaries and e-encyclopedias: free and proprietary, and other e-resources.	08hrs
		Total	**48hrs**

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THIRD 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 skills 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 of indexing systems like Pre-Coordinate and Post coordinate, PRECIS, Chain Indexing, POPSI, KWIC, UNITERM Indexing, Citation indexing, etc.;

CO6 Clear understanding of 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 syntactic, 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.	08hrs
Unit 5	:	**Evaluation of Indexing Systems**: – Criteria for evaluation: Recall and precision, coverage, and currency, evaluation studies: ASLIB – Cranfield; MEDLARS, SMART.	10hrs

Unit 6	:	**Current Trends in Information Retrieval System**:
		
		    – Information retrieval models – Boolean, vector space and probabilistic
		    – Developments, search and retrieval, full-text retrieval, IR standards, and protocols.
			08hrs

		Total	48hrs

References:

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LSH502: METHODS IN LIS RESEARCH

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 Knowledge use of 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	:	**Foundations of Research**: – Concept, meaning, need and steps in research; – Types of research – fundamental or pure and applied research - inter disciplinary and multidisciplinary approach; – Areas of research in LIS.	08hrs
Unit 2	:	**Research Design**: – Conceptualization and operationalisation; – Types of research design; – Identification and formulation of the problem; – Hypotheses; nominal and operational definition; – Designing a research proposal; – Literature search – Ethical aspects of research.	08hrs

Unit 3	:	**Research Methods**:
		
		     − Scientific method; historical method; descriptive method; survey method and case study method; experimental method, delphi method, user studies.
		
		 Metric Studies:
		
		     − Bibliometrics, Scientometrics, Informetrics, Webometrics, and Altmetrics
			08hrs

Unit 4	:	**Research Techniques and Tools**:
		
		     − Questionnaire; schedule; interview; observation;
		     − Scales and checklists;
		     − Library record and reports;
		     − Sampling techniques.
			08hrs

Unit 5	:	**Data Analysis and Interpretation**:
		
		     − Variables and its types;
		     − Descriptive statistics – measure of central tendency;
		     − Co-relation, mean, mode, median, tabulation, and generalization;
		     − Measures of dispersion, variance, and covariance, standard deviation;
		     − Inferential Statistics – Chi-Square T-test, ANOVA, Z-test;
		     − Graphical presentation of data – bar, pie, line-graphs, histograms;
		     − Statistical packages – SPSS and its variations.
			08hrs

Unit 6	:	**Research Reporting**:
		
		     − Structure and components, style, contents;
		     − Guidelines of research reports;
		     − Style manual: Chicago, MLA, and APA,
		     − Criteria for evaluation of research report.
			08hrs

		Total	**48hrs**

References:

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LSP503: 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);
  o Cartographic materials;
  o Manuscripts;
  o Graphic materials;
  o Music
  o Sound recordings;
  o Motion pictures & video recordings;
  o Micro forms and 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
(Assigning Subject Headings using at least one standard subject heading)
(Each student shall maintain practical records and submit the same at the time of practical examination).

Unit 1: Cartographic materials.	12 hrs
Unit 2: Manuscripts and graphic materials	10 hrs
Unit 3: Microforms.	10 hrs
Unit 4: Sound recordings.	10 hrs
Unit:5: Motion pictures & video recordings.	10 hrs
Unit 6: Electronic resources.	10hrs
Total	62hrs

LSP504: INFORMATION SOURCES (PRACTICE)

Objectives:

- To enable the students to examine a realistic information problems in practice;
- To get acquainted with a variety of information sources.
- To develop skills to carry out information searches using various bibliographic and non bibliographic database;
- To learn how to evaluate sources of information;
- To get practical experience in preparation of newspaper clippings;
- To get practical experience of handling and searching from different reference tools;
- To get practical experience in compilation of bibliographies and catalogues.

Course Outcome (CO):

CO1 Gain knowledge about different sources of information;
CO2 Understand the criteria's evaluation of information sources;
CO3 Gain experience in evaluation of electronic information sources;
CO4 Training to prepare press clippings;
CO5 Practical experience in compilation of bibliographies;
CO6 Practical experience in evaluation of websites;
CO7 Gain experience in compilation of catalogues.

Acquaintance with various sources of information and evaluation of information sources. (Each student shall compulsorily maintain practical record and submit the same at the same time of practical examination)

Unit 1		Evaluation of secondary sources.	16 hrs
Unit 2		Evaluation of tertiary sources .	08 hrs
Unit 3		Evaluation of electronic information sources.	10 hrs
Unit 4		Evaluation of websites .	08 hrs
Unit 5		Preparation of news paper clippings.	10 hrs
Unit 6		Compilation of bibliography / catalogue.	10 hrs
		Total	**62hrs**

LSS505: 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 Familiarise with methods and process practiced to preserve important documents in libraries;

CO3 Knowledge of evolution of storage devices and materials used to record and preserve knowledge through ages till modern times;

CO4 Awareness 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 Knowledge of records management and ERM code of ethics for digital archives;

CO7 Knowledge of methods, tools, legal issues related digitization and digital preservation.

Unit 1	:	**Introduction to Concepts of Archiving, Preservation and Conservation**: – Need and significance of archiving, preservation and conservation of information resources.	08hrs
Unit 2	:	**Evolution of Writing Materials:** – Clay, papyrus, metallic plates, skin, parchment, vellum, palm leaves, palm leaves, papyrus, parchment, and vellum - history, nature, use as writing materials, and their preservation, history of papermaking, 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 human being as an enemy of library materials, disaster prevention and recovery.	08hrs
Unit 5	:	**Study Various National Archival Initiatives of Different Countries**: – NARA of US; – Australian national initiatives; – Public archives of Canada. – National archive of India	08hrs
Unit 6	:	**Records Management Concepts and Issues:** – Information resource management, to include electronic resource management code of ethics for archivists. – digital preservation: tools and techniques, legal issues	08hrs
		Total	**48hrs**

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LSS506: INFORMATION LITERACY

Objective:

- To know the concept and importance of information literacy;
- To understand the historical perspectives of information literacy;
- To identify different types of information resources;
- To gain knowledge about information literacy models;
- To know the information literacy standards;
- To have knowledge about information literacy skill and competencies;
- To know the current trends in information literacy.

Course Outcome (CO):

CO1 Able to understand the concept and importance of the information literacy;

CO2 Able to understand the historical perspectives of information literacy;

CO3 Able to understand the different types of information resources literacy;

CO4 Have knowledge about information literacy models;

CO5 Understating of information literacy standards;

CO6 Have knowledge about information literacy skill and competencies;

CO7 Awareness of current trends in information literacy.

Unit 1	:	**Information Literacy:** – Meaning, definition; importance; historical perspective of information literacy.	08hrs
Unit 2	:	**Types of Information Literacy:** – Computer literacy, Media literacy, Digital literacy, Technology literacy.	08hrs
Unit 3	:	**Information Literacy Models and Components:** – SCONUL seven pillar, B-6, Seven, ANCIL, Empowering 8 Model.	08hrs
Unit 4	:	**Information Literacy Standards:** – ALA, IFLA, ACRL, Information literacy and libraries: Information literacy and higher education, Role of libraries in information literacy.	08hrs
Unit 5	:	**Information Literacy Skills and Competencies:** – Challenges of information literacy Programs, Information literacy initiatives in global perspective.	08hrs

Unit 6	:	**Trends in Information Literacy:**	08hrs
		– Current trends in information literacy; – Information literacy and lifelong learning; – Study of information literacy programs in the world including India.	
		Total	**48hrs**

References:

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LSS507: SPECIAL LIBRARY SYSTEM

Objectives:

- To define the basic objectives of special libraries, their types, and functions;
- To understand the historical development of special libraries in India;
- To understand the fundamentals of special library administration and management
- To gain knowledge about planning and organization of special libraries
- To know the procedure for the selection and recruitment of library staff.
- To study about the library finance, and budgeting system
- To know the requirements of infrastructure for a special library

Course Outcome (CO):

CO1   Understand the define the primary objectives of special libraries, their types, and functions of special libraries;

CO2   Understand the historical development of special libraries in India;

CO3   Understand the fundamental of special library administration and management;

CO4   Gain knowledge about planning and organisation of special libraries;

CO5   Know the procedure for selection and recruitment of library staff;

CO6   Study of library finance, and budgeting system;

CO7   Knowledge of requirements of infrastructure for a special library.

Unit 1	:	**Special Libraries:** − Meaning and definition, aims, objectives, and functions; − Types of special libraries: characteristics and their role in research and development environment, industries and decision making; − History and development of special libraries in India.	08hrs
Unit 2	:	**Information Resources Development and Management:** − Steps in information resources development and management; − Selection and acquisition of books, periodicals, technical reports, patents, standard, learned society publications, government documents, non- book materials including electronic publications; − Weeding, preservation, storage, and evaluation.	08hrs
Unit 3	:	**Planning and Organization of Library and Information Services** − Conventional, Computer based including Internet resources and services.	08hrs

Unit 4	:	**Human Resource Management:**	08hrs
		– Meaning, definitions, and objectives; – Selection and Recruitment of Library staff; – Qualifications, Duties, and Responsibilities, Conditions, Training and Education; – Motivation and Control.	
Unit 5	:	**Finance and Budgeting:**	08hrs
		– Meaning, definitions; – Resource Mobilization and Sources of Finance, budgeting Techniques, Budgetary Control.	
Unit 6	:	**Library Infrastructure:**	08hrs
		– Planning and Designing of Modern Special Library Building; – Furniture and Equipment.	
			48hrs

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Open Elective

LSE508: ELECTRONIC INFORMATION RESOURCES AND SERVICES

Objectives:

- To familiarize students with the meaning, definition, characteristics use and implications of Information Sources;
- To know the criteria for evaluation of electronic information resources;
- To study the different types of electronic information sources;
- To understand resource sharing and library networks;
- To gain knowledge about the national and international library consortia;
- To understand the different types of electronic information services;
- To gain knowledge about current trends in electronic information sources.

Course Outcome (CO):

CO1 Understand the meaning, definition, characteristics use and implications of Information Sources;
CO2 Know the criteria for evaluation of electronic information resources;
CO3 Gain knowledge of different types of electronic information sources;
CO4 Understand resource sharing and library networks;
CO5 Have knowledge about both national and international library consortia;
CO6 Understand the different types of electronic information services;
CO7 Gain knowledge about current trends in electronic information sources.

Unit 1	:	**Electronic Information Sources**: – Meaning, definition, characteristic, and use; – Types of sources (Primary, Secondary, Tertiary); – Evaluation of electronic information sources.	**06hrs**
Unit 2	:	**Types of Electronic Information resources**: – E-journals, e-books, e-theses, e-newspapers, blogs, and wikis, online dictionaries and encyclopedias: free and proprietary, and other e-resources.	**08hrs**
Unit 3	:	**Resource Sharing and Library Networks** – **Resource Sharing:** Meaning, definitions, objectives, advantages, and disadvantages; – **Library Networks:** Meaning, definitions, and the study of various library and information networks ; – National: INFLIBNET, DELNET; – International – CALIS, JANET, OCLC.	**10hrs**

Unit 4	:	**Library Consortia**:	10hrs
		– **Library Consortia:** Meaning, definitions, objectives, types, study of various library consortia; – National: FORSA, NKR, HELINET, CeRA , ICMR, SpaceNet, e-ShodhSindhu; – International: RLUK, ICOLC , EIFL, SANLIC, CONCERT, CARLI, etc.	
Unit 5	:	**Electronic Information Services:**	08hrs
		– Conceptual foundations, types and characteristics, traditional vs. digital information sources; – Bibliographic databases, Citation databases; – Full-text databases; – Portals, gateways, open access, alerting services (e-CAS, e-SDI) Bibliographic, referral, e-DDS.	
Unit 6	:	**Current Trends in Electronic Information Sources and Services**	06hrs
		- Institutional repositories; - Social networking; - On-line and off-line resources; - Discussion forums and information gateways; - Information search – types; - On-line searching, search techniques.	
		Total	**48hrs**

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FOURTH SEMESTER

Hard Core

LSH551: WEB TECHNOLOGY

Objectives:

- To study computer network, its types and topologies;
- To understand internet tools and techniques;
- To know the standards and specification of web technology;
- To study the implications of Web technologies for library and information management;
- To understand web design and host a web site using different tools and standards;
- To introduce the concept of digital library;
- To familiarize students with open sources digital library software.

Course Outcomes (CO):

CO1 Familiarizing students with internet, design, development of web design and digital library using metadata standards;

CO2 Understanding of topology and requirements of computer networks and type for networks available for accessing information online;

CO3 Knowledge of scripts and standards required for web design and programming;

CO4 Clear understanding of purpose, methods and cyber laws related to internet and its usage;

CO5 Knowledge of computer hardware, software and other infrastructure required to develop digital library;

CO6 Familiarity with metadata and other web standards to create digital libraries and open sources software available for creating digital repositories;

CO7 Familiarity with web technology related tools and services.

Unit 1	:	**Computer Networks**: - Concept, definition, and types of networks - PAN, LAN, CAN, MAN and WAN; - Network topologies: Star, Ring, Bus, Tree, Mesh, Line; - Network models and protocols: OSI, TCP/IP, IPv4, IPv6; SMTP, HTTP, FTP; - Network layers and network architecture; - Wireless networks: WiFi, WiMAX.	08hrs

Unit 2	:	**Internet**:
		
		    – Meaning, Origin, ISP;
		    – Internet tools and services: WWW, email, FTP, search engine, list forum, PING, Web sites, browser, blogs, semantic web, cloud computing;
		    – Internet-based library and information services.
			08hrs

Unit 3	:	**Web Technology**:
		
		    – Features and Functions of Web 1.0, Web 2.0, and Web 3.0.
		    – Study of the concepts and application of RSS feeds, metadata, tag clouds, blogs, social bookmarking, social networking;
		    – Web protocols - SOAP, open URL, relevant W3 standards and protocols, Library 2.0, SKOS.
		    – OJS and journal ranking;
		    – Online learning courses: Concept, need, and importance, MOOCs, SWAYAM.
		    – Gateways, portals.
			08hrs

Unit 4	:	**E-Resources and Emerging Technology:**
		
		    – E-resources: Concept, characteristics;
		    – Types: e-journals, e-books, ETD, etc.;
		    – Open access movement: understanding of OAI;
		    – Content management: CMS software and platforms like Joomla, Drupal, WordPress, and Moodle, etc.
			08hrs

Unit 5	:	**Web design**:
		
		    – Website – Meaning, types;
		    – Design tools – HTML, XHTML, SGML;
		    – Web standards - Metadata;
		    – Web servers: Apache, Internet Information Services (IIS), Xitami;
		    – Scripting languages: Client-side Scripting - CSS, VB Script and Java Script; Server-side Scripting - ASP and JSP.
			08hrs

Unit 6	:	**Digital Libraries**:
		
		    – Meaning, definition, characteristics, advantages, and disadvantages of digital libraries;
		    – The Infrastructure required for setting up digital libraries – hardware, software, and skilled manpower; digital materials.
		    – Institutional repositories;
		    – Open source software like DSpace, EPrint and Greenstone.
			08hrs

		Total	**48hrs**

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LSP552: METHODS IN LIS RESEARCH (PRACTICE)

Objectives:

- To familiarize students with the differentiation between a purpose statement, a research question or hypothesis, and a research objective;
- To know how sample size is determined in qualitative research;
- To understand the link between quantitative research questions, data collection and how research questions are operationalized in educational practice;
- To understand the criteria that can be used to select an appropriate statistical test to answer a research question or hypothesis;
- To study the steps involved in qualitative data collection;
- To enable students should understand why qualitative data analysis is considered to be "interpretive.";
- To understand the conventions of good APA style for scholarly writing.

Course Outcomes (CO):

CO1 Develop understanding of various kinds of research, objectives of doing research, research process, research designs and sampling;

CO2. Have basic knowledge on qualitative research techniques;

CO3. Have adequate knowledge on measurement & scaling techniques as well as the quantitative data analysis;

CO4. Have basic awareness of data analysis, and hypothesis testing procedures;

CO5 Familiar with conducting a literature review for a scholarly educational study;

CO6 Familiar with ethical issues in educational research, including those issues that arise in using quantitative and qualitative research;

CO7 Acquaintance with SPSS, PSPP, Mendeley, Zotero and EndNote.

(Each student shall compulsorily maintain practical record and submit the same at the time of practical examination)

Unit 1: Formulation of research objectives, hypotheses	10hrs
Unit 2: Review of literature	10hrs
Unit 3: Design of a questionnaire	10hrs
Unit 4: Acquaintance and hands-on experience with SPSS / PSPP	10hrs
Unit:5: Reference management tools: Mendeley / Zotero / EndNote	10hrs
Unit 6: Report writing	12hrs
Total	**62hrs**

LSP553: WEB TECHNOLOGIES (PRACTICE)

Objectives:

- To understand the Web Technologies and Markup Languages like HTML, XML, DHTML, XHTML;
- To introduce the concept of computer network and network protocols;
- To impart practical training in design and development of web pages and web blogs;
- To understand internet tools, services and techniques;
- To provide hands on experience with design, development and implementation of Digital Libraries;
- To make them familiar with digitization techniques and their application;
- To familiarize students with open source digital library software and digital library initiatives.

Course Outcomes (CO):

CO1 Familiarizing students with internet tools, services and online databases;
CO2 Clear understanding of plagiarism detection using software and online services;
CO3 Familiar with Web Content Management Systems (CMS) like Drupal / Joomla;
CO4 Knowledge of Web design and Web hosting tools like HTML and WordPress;
CO5 Knowledge of scripts and standards required for web design and programming;
CO6 Understanding standards to create digital libraries open source software like DSpace / Greenstone;
CO7 Knowledge of Internet and its application in LIS.

(Each student shall compulsorily maintain practical record and submit the same at the time of practical examination).

Unit 1		Internet tools and services	10hrs
Unit 2		Online database searching: Web directory, Web OPACs, WorldCat, and IndCat.	06hrs
Unit 3		Web design and Web hosting; HTML, WordPress	15hrs
Unit 4		Web Content Management Systems (CMS): Drupal / Joomla	10hrs
Unit 5		Digital library software: D-Space / Greenstone	15hrs
Unit 6		Use of plagiarism detection software.	06hrs
		Total	**62hrs**

LSP554: DISSERTATION AND VIVA VOCE

Objectives:

- To determine mode and methods for primary do familiarize students with formulating of 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 of 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 of research methodology into practice;
CO2 Formulate 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 of responses database to carry 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.

The students are required to select a topic for the dissertation in consultation with respective assigned guide and prepare the same during the Second year of the course. The dissertation should be written as an individual work, and Viva Voce should be conducted for 30 marks in lieu of internal assessment. Viva Voce board shall consist of chairman of the BOE as chairman of the Viva board, Chairman of the departmental council, concerned guides and an external examiner.

Quorum shall be three.

Total hours of instruction **62hrs.**

LSS555: 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 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 Generate subject bibliographies and provide them to needy users;

CO7 Knowledge of national documentation centres and international agencies involved in provision of information services.

Unit 1	:	**Information Centres and Services:** – Basic concepts, meaning, objectives, and functions – Components of information system: libraries, documentation centres, information centres, information analysis centres, museums, memories, institutional repositories, open archives,	**06hrs**
Unit 2	:	**Reference service**: – Meaning, definitions, need, purpose, and types. – Reference process, steps in providing reference services, qualities of a reference librarian and referral service.	**06hrs**
Unit 3	:	**Library Services**: – CAS, SDI, translation service, DDS; – Online services: Alerting services - LISTSERV and FAQ.	**08hrs**

Unit 4	:	- **Resource Sharing**:
		    − Meaning, definitions, objectives, advantages, and disadvantages.
		- **Library Networks**:
		    − Meaning, definitions, the study of various library and information networks – National: INFLIBNET, DELNET; International – CALIS, JANET, OCLC.
		- **Library Consortia**:
		    − Meaning, definitions, objectives, types, study of various library consortia – National: FORSA, NKR, HELINET, CeRA , ICMR, SPACENET, e-ShodhaSindhu and International: RLUK, ICOLC , EIFL, SANLIC, CONCERT, CARLI, etc.
			12hrs

Unit 5	:	**National Documentation Centres:** − NISCAIR, DESIDOC, NASSDOC and NIMSME.	**06hrs**

Unit 6	:	- **Information Systems and Databases**:
		    − International Nuclear Information System (INIS).
		- **Study of various databases**
		    − BIOSIS, INSPEC, ERIC, AGRIS, and MEDLINE, BTIS, ENVIS PIS.
			10hrs

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LSS556: PRACTICAL EXPERIENCE / INTERNSHIP AND LIBRARY TOUR

Objectives:

− 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. The objectives of internship and library tours are:

   o To increase the knowledge and skills of recent graduates;
   o To upgrade their skills in a specific area of information service;
   o To train them in order to boost their efficiency;
   o To train them to adapt to the existing working conditions.

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 types of libraries like a university, professional, research, and public libraries.

CO4 Development of analytical skills, and knowledge.

CO5 Enabled to critically analyze library policies, functions, activities, services, and processes of different libraries

CO6 By visiting all kinds of libraries and information Centers in other states or countries, they can see directly what they have learned and follow in their future.

CO7 Fulfillment of the course objectives enables students to visit some real libraries and study the functions and services.

a) **Work experience:** The M.Lib.I.Sc. Students shall work 6 (six) hours per week in a library identified by the department and submit the work experience report before the commencement of theory examinations. **70 Marks**	**62hrs**
b) There shall be a library tour, which is compulsory, and the student has to submit a tour observation report. 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.	

Distribution of Internal Assessment Marks for Paper Number LSS 556

Attendance	10Marks
76% - 85% - 4 Marks 86%-95% - 6 Marks 96% - 100% - 10 Marks	
Work Experience	**70 Marks**
Tour Report	**20 Marks**

Distribution of Internal Assessment Marks for all Practical papers

Attendance	05 Marks
76% - 85% - 2 Marks 86%-95% - 3 Marks 96% - 100% - 5 Marks	
Two Internal Tests	**15 Marks**
Practical Records	**10 Marks**

Distribution of Internal Assessment Marks for all Theory papers

Attendance	05 Marks
76% - 85% - 2 Marks 86%-95% - 3 Marks 96% - 100% - 5 Marks	
Two Internal Tests	**15 Marks**
Two Assignments	**05 Marks**
One Seminar	**05 Marks**

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