



University of Calcutta
Department of Library & Information Science
87/1, College Street, Kolkata – 700073

Syllabus for Integrated B.Lib.I.Sc. - M.Lib.I.Sc. Course (Under CBCS)

(Recommended by the BOS in Library and Information Science on 27.06.2019 and subsequently recommended by the Faculty Council for PG Studies in Education, Journalism and Library Science on 01.07.2019 and approved by the Syndicate on 08.08.2019 and confirmed on 27.08.2019)

With Effect From 2019-2020 Session

Semester	Course Code	Course title	L (TH)	T (TU)	P (PR)	Total Credit	Marks = Th +Int
I							
	LIS 101 CC	Library, Information and Society	3			3	40+10
	LIS 102 CC	Resource Description I (Theory)	3			3	40+10
	LIS 103 CC	Resource Description I (Practice)			3	3	40+10
	LIS 104 CC	Knowledge Organization I (Theory)	3			3	40+10
	LIS 105 CC	Knowledge Organization I (Practice)			3	3	40+10
	LIS 106 CC	Information Sources, Services and Systems (Theory)	3			3	40+10
	LIS 107 CC	Information Sources, Services and Systems (Practice)		3		3	50
	LIS 108 CC	Library Laws and Ethics	3			3	40+10
	LIS 109 CC	ICT Applications (Theory)	3			3	40+10
	Total		18		09	27	360+90 =450
II							
	LIS 201 CC	Library Management	3			3	40 + 10
	LIS 202 CC	Information Retrieval I	3			3	40+10
	LIS 203 CC	Resource Description II (Theory)	3			3	40+10
	LIS 204 CC	Resource Description II (Practice)			3	3	40+10
	LIS 205 CC	Knowledge Organization II (Theory)	3			3	40+10
	LIS 206 CC	Knowledge Organization II (Practice)			3	3	40+10
	LIS 207 CC	Preservation and Conservation of Library Materials	3			3	40 + 10
	LIS 208 CC	User Studies and User Education	3			3	40+10
	LIS 209 CC	ICT Applications (Practice)			3	3	40+10
	Total		18		09	27	360+90 =450

Total	B.Lib.I.Sc. Course					54	900
III	LIS 301 GE	Information and Communication Process	4			4	40+10
	LIS 302 CC	Management of Information Systems and Centres	4			4	40+10
	LIS 303 CC	Quantitative Research Methods	4			4	40+10
	LIS 304 CC	Technical Writing	4			4	40+10
	LIS 305 CC	Information Consolidation and Repackaging			3	3	40+10
	LIS 306 CC	Information Retrieval II	4			4	40+10
	LIS 307 CC	Information Processing	2		2	4	40+ 10
	LIS 308 CC	Digital Preservation	3			3	40+10
		Total	21		9	30	320+80 =400
IV	LIS 401 CC	Qualitative Research Methods	4			4	40+ 10
	LIS 402 CC	Digital Content Management			3	3	40+10
	LIS 403 CC	Library Networking (Theory)	4			4	40+ 10
	LIS 404 CC	Library Networking (Practice)			4	4	40+ 10
	LIS 405 GE	Open Knowledge System	4			4	40+ 10
	LIS 406 DSE	Discipline Specific Electives (Theory) (Any One)	4			4	40+10
	LIS 406 DSE1	Academic Library Systems and Services					
	LIS 406 DSE2	Community Information Systems and Services					
	LIS 406 DSE3	Medical Information Systems and Services					
	LIS 406 DSE4	Legal Information System and Services					
	LIS 406 DSE5	Manuscript and Archival System and Services					
	LIS 406 DSE6	Industrial Library System and Services					
	LIS 406 DSE7	Informetrics					
	LIS406 DSE8	Children's Library system					
	LIS406 DSE9	IPR Management in Libraries					
	LIS 406 DSE10	LIS Education					
	LIS406 DSE11	Library Architecture					
	LIS406 DSE12	Agricultural Information Systems and Servisecs					
	LIS406 DSE13	Public Library Systems and Services					
	LIS 406	Comparative Librarianship					

	DSE14						
	LIS 407 DSE	Discipline Specific Electives (Project on the subject chosen under LIS406DSE)		3		3	50
	LIS 407 DSE1	Academic Library Systems and Services					
	LIS 407 DSE2	Community Information Systems and Services					
	LIS 407 DSE3	Medical Information Systems and Services					
	LIS 407 DSE4	Legal Information System and Services					
	LIS 407 DSE5	Manuscript and Archival System and Services					
	LIS 407 DSE6	Industrial Library Systems and Services					
	LIS 407 DSE7	Informetrics					
	LIS 407 DSE8	Children's Library system					
	LIS 407 DSE9	IPR Management in Libraries					
	LIS 407 DSE10	LIS Education					
	LIS 407 DSE11	Library Architecture					
	LIS 407 DSE12	Agricultural Information Systems and Services					
	LIS 407 DSE13	Public Library Systems and Services					
	LIS 407 DSE14	Comparative Librarianship					
	LIS 408 CC	Internship*		4*			50
	Total		16	7	7	30	280+120 =400
Total	M.Lib.I.Sc Course					60	800
Total	Integrated B.Lib.I.Sc - M.Lib.I.Sc Course					54+60 =114	900 +800 =1700

L(TH)=Lectures or theoretical classes, T(TU)=Tutorial Classes/Project Classes, P(PR)=Practical Classes, Th=Marks allotted for written examinations(mode of theoretical examinations), Int=Marks allotted for internal assessment.

*Internship will be arranged after Semester-end examination (completion of all theory and practice).

Syllabus for Integrated B.Lib.I.Sc. - M.Lib.I.Sc. Course (Under CBCS)

SEMESTER I

LIS 101CC Library, Information and Society

3L+0T+0P= 3 Credits Classes = 45 Marks= 40+10

- Unit 1:** Social foundation: Society-Definition, social institutions; Library as a social institutions; History of libraries/information centres and development of librarianship as a service profession; Basic laws including Five laws of library science – Different interpretations and implications. Some eminent thinkers of libraries. Different types of libraries and their roles and functions, with special reference to India-National libraries, Academic libraries, Public libraries, Special libraries and information centres.
- Unit 2:** Information: Definition, characteristics and its role in changing society. Freedom of access to information. Information explosion, UAP. Intellectual property rights - copyright, patents censorship. Information society- evolution and implications. Knowledge Society - characteristics
- Unit 3:** User communities-Users, their characteristics, User study, literacy programme; community survey; community information centres and services to users. Library extension services. Library and education-Formal, non-formal and distance education.
- Unit 4:** Library movement and information activities with special reference to India- Library legislation- Need, the Model Bill. Library and information service profession- criteria of the profession, Information Ethics, Governance, Duties, Role of Library Association /Professional associations- Local, Regional, National and International. Library and information policy in India. Organizations involving the development of libraries and information system. UGC- Committees and Commissions for the development of libraries and library education. Role of UNESCO.IFLA.

LIS 102CC Resource Description I (Theory)

3L+0T+0P= 3 Credits Classes = 45 Marks= 40+10

- Unit 1:** Library catalogue - definition, importance, objectives functions. Contributions of C A Cutter, S R Ranganathan, A D Osborn, Seymour Lubetzky, E Svenonius and others. Library catalogue and bibliography. Cataloguing, indexing and classification. Bibliographic Organisation and control -UBC.
- Unit 2:** Forms of catalogue. Physical forms - conventional forms, non-conventional forms. Machine readable catalogue. Inner forms – Entries, formats, kind functions and their suitability in different types of libraries. Simplified & selective cataloguing - advantages and disadvantages.
- Unit 3:** Normative Principles, canons & principles of cataloguing. ICCP, IME/ICC. ISBDs Code-Components, Levels, features. Historical development of cataloguing code – comparative study of codes in terms of their objectives, principles, rules and concept of authorship. Problems in the choice of statement of responsibility. Choice and rendering of headings, Indic names, pseudonyms, anonymous works, Uniform titles. Rules for filing entries.
- Unit 4:** Automation, other development and organizations of cataloguing. New media and its effects on cataloguing. Networks, centralized and cooperative cataloguing, Bibliographic Utilities - OCLC Inc. RLIN, WLN etc. Union catalogue – layout and its compilations. WorldCat Organization of

cataloguing department.; Subject cataloguing – concepts, purpose, general principles, lists of subject headings. Sears List of Subject Headings, LCSH, FAST.

LIS 103CC Resource Description I (Practice)

0L+0T+3P= 3 Credits Classes = 90 Marks= 40+10

Cataloguing of documents in English and regional languages (optional) Bengali/ Hindi/ Nepali/ Olchiki) - Bibliographic Description and rendering of access points in English and regional languages by AACR 2R and CCC (with amendments).

Subject cataloguing – Sears List of Subject Headings/ LCSH.

LIS 104CC Knowledge Organization I (Theory)

3L+0T+0P= 3 Credits Classes = 45 Marks= 40+10

- Unit 1:** Library classification –need and purpose; Classification schedule and its components. Kinds of schemes – Enumerative, Faceted. Introducing different concepts – Isolate, facet, array, chain, notation etc.
- Unit 2:** Universe of subjects. Subjects - kinds – Basic subject (simple, basic and compound basic), Compound subject, complex subjects, phase relations. Isolates of auxiliaries – common (standard sub-divisions) and specials; Speciators – kind 1 & kind 2.
- Unit 3:** General theory of library classification, canons, postulates, principles, fundamental categories, facet analysis. Three planes of work. Notational system – kinds, qualities, mnemonics, devices, round & levels.
- Unit 4:** Schemes of classification – Introducing different classification schemes, class number, book number, collection number, broken sequence, Relative Index etc.

LIS 105CC Knowledge Organization I (Practice)

0L+0T+3P= 3 Credits Classes = 90 Marks= 40+10

Classification of documents by DDC (Latest edition available in the Department), construction of book number in different methods

LIS 106CC Information Sources, Services and Systems (Theory)

3L+0T+0P= 3 Credits Classes = 45 Marks= 40+10

- Unit 1:** Types of Information sources-Documentary and Non-Documentary Information Sources. Documentary Information sources: primary, secondary and tertiary, non-paper media and bibliographic control, subject bibliography, national bibliography, trade bibliography, universal bibliography, citation indexes. Information source and information resource. Evolution of reference and information sources. Internet as source of information.
- Unit 2:** Concept of reference and information services - Definition, Need, Nature, Types and Function, Implications of Five Laws of Library Science. Study of subject. Principles and theories of reference service. Evolution of reference service.; Tools and Techniques of references and information services. Abstracting and Indexing services. CAS; SDI;

Translation services, Reference services; Reference processes- Understanding the queries, Literature search and selection of documents. Feedback and user satisfaction

Unit 3: Organisation of reference and information service. Qualification and qualities of a Reference librarian/information specialist. Reference and information services in different types of libraries/information centers and different types of users' groups. Role of the reference librarian in future. Reprography & Micrography - Types of reproduction. Methods and techniques of reproduction, storage and preservation. Reading apparatus. Planning of a reprographic unit. Reprographic facilities in India. Intellectual property rights and reproduction.

Unit 4: Recent trend and impact of appropriate technologies on information services. Cooperation in information service: Networking and database. Information systems and centres: information Centres :-Information systems -Meaning and structure .Library as an information systems :A brief study of UNISIST, AGRIS, INIS, DEBSIS, MEDLARS, NISSAT, NICNET, INFLIBNET, DELNET, CALIBNET etc, Information centres: Information Analysis Centres: A brief study of FID, ASLIB, IFLA, VINITI, IASLIC, DRTC, INSDOC, NASSDOC, DESIDOC, SENDOC, etc.

LIS 107CC Information Sources, Services and Systems (Practice)

0L+3T+0P= 3 Credits Classes = 90 Marks= 50 (Project I: 30, Project II : 20)

- **Project I :** Study of subject and preparation of Information product.
- **Project II :** Study of Information Sources

LIS 108CC Library Laws and Ethics

3L+0T+0P= 3 Credits Classes = 45 Marks= 40+10

Unit 1: Library Philosophy: LIS profession, Professional ethics

Unit 2: Library legislation: Need and essential features, Library legislation in India with special reference to features of all the Acts, comparative study

Unit 3: Press and Registration of Books Act, Delivery of Books (Public Libraries) Act, Indian Copyright Act. Information Technology Act

Unit 4: Right to Information Act; Creative Commons License; TRIP; TRIM.

LIS 109CC ICT Applications (Theory)

3L+0T+0P= 3 Credits Classes =45 Marks= 40+10

Unit 1: Information Technology : Meaning, scope and areas of applications. Concept of information technology-types. Introduction to computers-fundamental, parts of computers: hardware, software, operating systems (MS-DOS/UNIX). Printing and Graphic technologies. Hardware: Computers, Modems, Telephone, Telex, Facsimile machines. Electronic publishing. Concepts of Information Super highway: WWW, Internet, Digital Library.

Unit 2: Computer language & Electronic data processing: Need, Types, Flowcharts, Algorithms, High level language : Software package : System Software, Application software, Boolean logic and operators. Programming language, structural programming, Scripting Language, data & file organization.

Unit 3: Library Automation : Need, House keeping operations, Indian Scenario. Design and development of automated acquisition control, serial control, circulation control.

Unit 4: AI & Expert systems: Fundamentals of AI, NLP and Expert systems. Introduction to AI programming languages: LISP, PROLOG, etc.

SEMESTER II

LIS 201 CC Library Management

3L+0T+0P= 3 Credits Classes = 45 Marks= 40+10

Unit 1: Organizational structure of a library, different sections, ordering, acquisition, technical processing, maintenance, collection development: stock verification, Different Charging and Discharging Methods. Library Personnel: Job description and Job analysis, recruitment, training and development. Library Committee, Library Reports, Library Rules.

Unit 2: Management Principles, Library standards, Reengineering, Empowerment, Benchmarking, Down Sizing and Learning Organizations. 6 SIGMA and New Technologies, Qualities of a good Manager.

Unit 3: Financial Management, budgeting techniques and methods, budgetary control, cost benefit analysis. Human resource management - job evaluation, delegation, decision making, performance appraisal, organizational communication. Budgeting techniques and methods, budgetary control.

Unit 4: Security, Maintenance. Moving a library, General Words of Wisdom, International construction and design codes, selection of notable and award-winning libraries for inspiration- AIA/ALA Library Buildings Award Program, National Libraries, Carnegie Libraries, Other Libraries of Note, Some Indian examples
Public Spaces, Reinventing Libraries, History of Library Buildings, Initial stages of construction or renovation; Modular building, Planning Process: Needs Assessment, the Building Program, Site Selection, Requests for Proposals, Space Planning, Selecting and Working with an Architect, Colour, Signage. Standards and information for designing an accessible library, Health issues, Furniture Selection, standards and specification

LIS 202 CC Information Retrieval I

3L+0T+0P= 3 Credits Classes = 45 Marks= 40+10

Unit 1: Information retrieval- Historical development of Information Retrieval. Contribution of different people in development of Information Retrieval. Its components- process-difference between data retrieval and information retrieval. Models of information retrieval system- Boolean model, Extended Boolean model, Probabilistic model, Vector space model, Linguistic model etc. Inverted file

Unit 2: Abstracting : Abstracts - Kinds and types of abstracts, Steps in Abstracting. Indexing - Pre Coordinate Index (Chain, PRECIS including COMPASS, POPSI), Post- coordinate (Uniterm), and Keyword indexing. Subject analysis, Problems of subject analysis.

Unit 3: Subject indexing language: Components and their functions, Historical development: theory and characteristics, syntax and semantics. Vocabulary control devices: SH Lists, Thesaurus, Classaurus—their design and application. Designing an IR system.

Unit 4: Subject indexing systems: Assigned and derived indexing—chain, PRECIS, COMPASS, POPSI, NEPHIS, Uniterm,. Optical coincidence, peek-a boo, punched card systems, etc..Key word indexing, use of roles, links and weighting in concept specification.

LIS 203 CC Resource Description II (Theory)

3L+0T+0P= 3 Credits

Classes = 45

Marks= 40+10

Unit 1 : Content Designation : Role of content designation in bibliographic data exchange; Content Designation Standards- Physical Standards (ISO-2709, Z 39.2, MARC-XML etc.); Content Designation and Logical Standards (ISBDs, AACR, FRBR, FRAD, FRSAD etc.);Content Designation Standards – Framework Standards (CCF, UNIMARC, MARC-21) RDA

Unit 2: Bibliographic Data Formats : Evolution of Principles for Bibliographic Description; Development of Codes for Bibliographic Record; □ Standards and Formats for Bibliographic Record; ISBD, ISO 2709, CCF, UNIMARC, MARC 21, etc.; Comparison of CCF, UNIMARC and MARC-21; Distributed Cataloguing (Z 39.50 protocols and services) BIBFRAME

Unit 3: Authority Data Formats : Scope, objectives and use of authority data formats; Interaction of Authority list with library catalogue; MARC-21 Authority Data Format; FRAD and FRSAD model

Unit 4 : Generic and Domain-specific Metadata Schemas: Metadata: Use, functions, models and best practice guidelines; Generic Metadata Schema: Dublin Core; Metadata Schema using RDF and XML; Learning Object Domains: GEMS, IEEE-LOM, CanCore; ETD Domain: ETD-MS, UKETD, Shodhganga; Other domains: Geographical Data, Science Data, Music, Image, News Items, Publishing etc.

LIS 204 CC Resource Description II (Practice)

0L+0T+3P= 3 Credits

Classes =90

Marks= 40+10

Unit 1 : Resource description of Non-book materials by AACR 2R, Introducing practical aspect of RDA

Unit 2 : Resource description of Non-book materials by CCC

Unit 3 : Resource description of Non-book materials according to MARC 21

LIS 205 CC Knowledge Organization II (Theory)

3L+0T+0P= 3 Credits

Classes = 45

Marks= 40+10

Unit 1: Universe of Knowledge; Modes of formation of Subjects. Spiral of scientific method

Unit 2: Comparison of DDC, UDC & CC. General features of other major classification schemes, like LCC, BC etc. Application of Normative principles in these schemes.

Unit 3: Modern trends in classification – special/ depth classification schemes; BSO-Switching /indexing language; classification. Absolute Syntax and theory of integrative level.

Unit 4: Role of major organisations: DRTC, CRG, ISKO. Classification Conferences, Automatic Classification.

LIS 206 CC Knowledge Organization II (Practice)

0L+0T+3P= 3 Credits Classes = 90

Marks= 40+10

Unit 1: Classifying documents using UDC

Unit 2: Classifying documents using CC7

LIS 207 CC Preservation and Conservation of Library Materials

3L+0T+0P= 3 Credits

Classes = 45

Marks= 40+10

Unit 1: Preservation and conservation; Policy and Planning; Understanding the relationship between preservation management and appropriate conservation treatment; Policy of preservation.

Unit 2: Factors for deterioration of information resources and curative measures. Mending, Binding, Housekeeping. Preventive and Restorative treatment.

Unit 3: Evaluation and application of appropriate and modern conservation treatments; Binding.

Unit 4: Restoration of print, non-print and electronic materials Conservation applications for library and archives, Preservation of manuscripts. Importance of digital preservation- advantages and disadvantages.

LIS 208 CC User Studies and User Education

3L+0T+0P= 3 Credits

Classes = 45

Marks= 40+10

Unit 1: Users: identification of user groups and categorisation of users. User of information: user in different environments, and performing different activity. Information seeking behaviour of users. Inter-personal communication. Barriers to information communication. Man-machine interface.

Unit 2: User education: Historical perspective of user education. Different methods of User education. Technologies used in User Education. Library orientation, user assistance, Bibliographic instruction, programmed texts, work books, computer assisted library instructions. Information literacy. Philosophy of user education.

Unit 3: User Studies: Purpose and types. Library and literature use studies, Application of user studies. organization of user studies. Different methods of user studies.
Survey : objectives, resources, Staff, Selecting data collection technique, Time table, Designing data Collection, Selecting the data collection, Pilot survey, Writing and publication of results.

Unit 4: Information use promotion: different method. Information marketing. evaluation and management, case study. .

LIS 209 CC ICT Applications (Practice)

0L+0T+3P= 3 Credits

Classes = 90

Marks= 40+10

Unit 1: Operating System : Windows, DOS, Linux

Unit 2: Programming Language, Scripting Programming Language

Unit 3: Word Processing, Spreadsheets, Presentation, DBMS

Unit 4: Library Automation Software : ILMs

SEMESTER III

LIS 301 GE Information and Communication Process

4L+0T+0P= 4 Credits

Classes = 60

Marks= 40+10

Unit 1: Information science as a discipline:-Definition, scope and philosophy, Information Science and its relation to library Science, Documentation, Information Storage and Retrieval. Informatics, Information Management, Cybernetics, Information Technology, Typology of information sectors in modern society, Information Professions and their specializations, Information Society.

Unit 2: Information:- Fundamental concepts, kinds ,nature, characteristics and definitions. Data, Information, Knowledge and Wisdom. Information at various levels: Physical, Biological and Social. Information Theory – Shannon and Weaver, Entropy, Semantic aspect. Evolution of human communication:- Communication channels, Verbal and Non-verbal communication. Models of communication.

Unit 3: Generation of information: mode and forms, Communication process and media. Barriers to communication and remedial propositions. Sociology of information: role of information in social change and national development. National Information policy- Aims, objectives, approach, policy statement and planning with special reference to India.

Unit 4: Transborder Data Flow. value of socio-cultural information and its relation to civilization. Pre-industrial Industrial and Post Industrial societies. Right to Information-freedom of access. Confidentiality and privacy of information. IPR, Information Literacy, Economics of information:- Information as a commodity, Information as a resource and Information as a factor of production. Machlup's model of production and distribution of knowledge. Economic analysis models and their application to information industry. Cost benefit and Cost effectiveness ; value, price and cost of information. Marketing of information products and services-Planning and processes.

LIS 302CC Management of Libraries and Information Systems and Centres

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

Unit 1: General overview of systems: General Systems Theory. System Analysis & flow-charting. Information systems: Libraries, Archives, Information Centres and databases. General concepts of modern management: - Definition, scope and nature,

management theories, Schools of Management, organisational structure-
Bureaucratic and Democratic thought.

- Unit 2:** Organizational Theory- Group dynamics, Behavioral approach, System approach, Organizational ideologies- Power orientation, Role orientation, Task orientation and Person orientation. Management of change. Planning process: - Factors in planning; systems approach to LMBO; policy making; Conflict negotiation, Risk analysis; Feasibility analysis; Forecasting; Control and Evaluation Planning Local and National Information Systems- Decision aids, CPM/PERT
- Unit 3:** Personnel Management: - Manpower planning, performance evaluation, human resource development, motivation, leadership, supervision and control. Job analysis and evaluation. Work flow, Managerial communication- Formal and Informal, Inter-group, Inter personal, Inter-organizational; Managerial grid; Management Information System.
- Unit 4:** Financial and Resource Management: Fiscal Planning- Budgeting, accounting and auditing; PPBS and Zero-Based Budgeting, Pricing & costing of information materials and information services, Capital expenditure planning. Time & motion study; productivity. Equipments and furniture, Building planning & maintenance, space & layout.

LIS 303 CC Quantitative Research Methods

4L+0T+0P= 4 Credits Classes = 60 Marks= 40+10

- Unit1:** Quantitative Research : meaning, scope; Bibliometrics: Origin, definition, scope. Libra metrics, Bibliometrics, Informetrics and Scientometrics. Imperial law s including laws of scattering and their interpretations
- Unit2:** Bibliometric distributions- Gaussionand Zipfian(skew) distribution; Zipf's law, Lotka's law and Bradford's law- Vickery's interpretation of Bradford's law and Brooke's work. Rank frequency, size frequency and class frequency distribution.
- Unit3:** Growth, Aging: Obsolescence; Half-life. Validity informetric measurement and application inlibraries and information centres; Citation analysis and related concepts
- Unit4:** Operations Research: definition, nature, purpose. Linear programming: Queing theory; Network analysis (PERT/CPM), Work study and decision analysis. Simulational Monte Carlo techniques; Sequencing; Searching and Inventory problems, Quantitative Techniques: Statistical methods- data collection and presentation

LIS 304 CC Technical Writing

4L+0T+0P= 4 Credits Classes =60 Marks= 40+10

- Unit 1:** Process of written communication. The publication process. Filtering in written communication: author, editor, reference, publisher, critic, user relationship. Role of communication and information presentation specialists – Graphical arts specialists, in AV aids (e.g. slides, video & Audio cassettes etc.), Translators etc.
- Unit 2:** Technical Writing: Meaning, features and scope, primary and secondary technical communication, writing for mass media. Different forms of technical writing:

Unit 3: Technical reports, feasibility reports, Technical manual, technical articles, process bulletins, reviews, dissertations .Other forms of writing: Business communication and official correspondence, Newsletters, Newspaper reports, extension literature, advertisement.

Unit 4: Guidelines for technical writing. Identification, Characteristics and information seeking behaviour of target user groups. Information collection: sources and methods, organisation and interpretation of information, knowledge and skills required for information collection and analysis.

LIS 305 CC Information Consolidation and Repackaging

0L+0T+3P= 3 Credits Classes = 90

Marks= 40+10

Unit 1: Content analysis abstract and index, newsletters, bulletin, In house- Journals etc.

Unit 2: Bibliography, trend reports, reviews, digests, dictionaries, style manuals, standards, specifications etc.

LIS 306 CC Information Retrieval II

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

Unit 1: Information retrieval – processes and techniques. Search strategies- general principles and steps, Boolean search. Word proximity search and truncation :parsing rules.

Unit 2: Computerised IR system: Database structure and organization—Types (Bibliographic, Text, numeric etc.), file design and organization of files in a database. On-line IR, meaning and process, on-line vs Batch mode, development of on-line IR, hardware and software requirements, use of NLP tools and techniques for IR.

Unit 3: Discovery tools. Standardization of bibliographic description and format. Methodology of designing cataloguing codes.

Unit 4: Evaluation of IR retrieval effectiveness. User need analysis – expressed need and actual need. Recall, precision, relevance, pertinence and aboutness. Advanced Retrieval Techniques – Image retrieval, Audio retrieval.

LIS 307 CC Information Processing

2L+0T+2P= 4 Credits Classes = 30+60

Marks= 40+10

Unit 1: Overview of information discovery; Query refinement and relevance feedback.

Unit 2: Designing depth Classification scheme on a specific topic.

Unit 3: Designing an IR thesaurus/ Classaurus on a specific topic.

Unit 4: Text processing methods, String processing, Building an index, Porter stemming algorithm, Mixed content and mixed metadata.

LIS 308 CC Digital Preservation

3L+0T+0P= 3 Credits Classes = 45

Marks= 40+10

Unit 1: Introduction to digital preservation, Triad of digital preservation, historical background.

Unit 2: Steps in digital preservation process, digital preservation strategies, digital content, metadata for digital preservation.

Unit3: Digital storage and media files, digital preservation tools, digital preservation software platform, Digital archives.

Unit4: Digital content and IPR, Digital Preservation initiatives, future research challenges.

SEMESTER IV

LIS 401 CC Qualitative Research Methods

4L+0T+0P= 4 Credits Classes = 60 Marks= 40+10

Unit1: Research:-Meaning, Objectives, Characteristics, kinds – fundamental, basic, applied, types – historical, experimental, descriptive, survey, Major Research Paradigm: transdisciplinary , multidisciplinary, interdisciplinary; etc

Unit 2: Types of Research-Historical Research, Experimental Research, Descriptive Research-Nature, scope and importance.; Survey Research- Nature and Types. Research in Social Sciences.: Sampling-Types and techniques, case study, other methods

Unit 3: Research Setting and Design: Steps of Research-selection and statement of the problem. Hypotheses, Collection, Evaluation, Organisation, Analysis and Interpretation of Data; Research Proposal and Research Design; research Report-format, style and structure, research report

Unit 4: Techniques of collecting primary data: Observation-direct, indirect, Questionnaire-structured/unstructured,open/closed,Schedules,Interview, scheduling

LIS 402 CC Digital Content Management

0L+0T+3P= 3 Credits Classes = 90 Marks= 40+10

Unit 1: Collection development and organisation of digital resources, e-books, e-journals, ETD.

Unit 2: Digital Library – concept, library portal designing with HTML.

Unit 3: Institutional repository, digital archive.

Unit 4: Content Management Tools- Drupal, Joomla; Content management techniques: Blog, Wiki, Podcast, RSS, Web Conferencing, etc.

LIS 403 CC Library Networking (Theory)

4L+0T+0P= 4 Credits Classes = 60 Marks= 40+10

Unit 1: Library Automation introduction, advantages, planning library automation.

Unit 2: Areas of library automation, library management software: commercial and free and open source.

Unit 3: Social Networking: meaning, nature, advantages, disadvantages, use in LIS field, some examples- facebook, twitter,etc.; Techniques like social bookmarking, folksonomy, mashup technology, etc.

Unit 4: Library website-meaning, nature, functions; Studying library websites and their important features, Planning and designing methods of library website ; Developing contents-text, graphics, images, etc.; An overview of HTML, DHTML,XML,FrontPage,DreamWeaver, PHP

LIS 404 CC Library Networking (Practice)

0L+0T+4P= 4 Credits Classes = 120 Marks= 40+10

Unit 1 : Designing a library website using: HTML, DHTML, XML, FrontPage, DreamWeaver,PHPetc.,

Unit 2 : Report Writing-,Presentation Tools and its application

LIS 405 GE Open Knowledge System

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

Unit 1 : Open Access : Definition, Purpose/Need of Open Access, History of Open Access, Open Information and Data Resources (Open Data, Open Educational Resources)

Unit 2 : Green Open Access, Gold Open Access, Gratis and Libre Open Access, Hybrid Model

Unit 3 : Promoting Open Access : OA Initiatives and Scenario, OA Supporters (Persons), OA Organizations, OA Journals (Fee-based and No-Fee based, Popular), OA Scholarly Publisher Association, OA Repositories, Institutional Repositories. Major OA Networks, Facilitators, Coalitions and Initiatives (INASP, JISC, SPARC, SHERPA Project, Global OA Portal-UNESCO, OpenAIRE, COAR, EOS, NDLTD)

Unit 4 : Open Access Mandates and Policies : Institutional Mandates (NIH Public Access Policy), National Centre for Atmospheric Research . Government level Mandates : UK , US , Europe, Canada, India ; Thesis Mandates –Shodhganga. Open Access Policy: Coalition of Open Access Policy Institutions (COAPI) , Rutgers Open Access Policy, , Publication Policies of Major Research Funders, IES Mandate, The World Bank OA Policy, UNESCO OA policy, Research Funders' Open Access Policies Data Archiving Policies

LIS 406 DSE Discipline Specific Electives (Any One)

LIS 406 DSE1 Academic Library Systems and Services

4L+0T+0P= 4 Credits Classes =60

Marks= 40+10

Unit 1 : The evolution of higher education in India and how it has shaped the development of academic libraries; Role of UGC and other Bodies in Promoting Academic Libraries; Issues facing academic libraries; the teaching, service, collecting, preservation, and access roles and functions of academic libraries.

Unit 2: Management issues of academic libraries such as leadership, recruitment and retention, budgeting, balancing support between instruction and research, etc.

Unit3: Resource Sharing Programme; Need and Objectives; INFLIBNET : Information and Library Network; Academic Library Networks and Consortia.

Unit4: Academic library standards and guidelines; the role of professional associations of interest to academic libraries.; Literature of specific interest to academic libraries.

LIS 406 DSE2 Community Information Systems and Services

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

Unit 1: Community Information: Meaning, nature and scope, origin and development in different countries with special reference to USA, UK and developing countries.

Community: meaning, types, nature, users and non-users community, literate and non-literate community, stimulating the non-user community, community need, community profile.

Unit 2: Information need and related concepts, information seeking behaviour, communication and other means, role of mass media and local agencies in different Sectors, Local History Collection : history and development; nature and components; ways of collection of data; records management.

Unit 3: Community information services and public libraries and/or non-public libraries in different areas, various ways and means including application of modern technologies. Role of UNESCO Public Library Manifesto, 1994; RRRLF and other agencies; Community initiatives and welfare schemes.

Unit 4: Community survey: survey method-designing of questionnaire, identification of information needs, observation, participant and/or non-participant – interview techniques – sampling – coding – report writing and analysis – Conclusion drawn.

LIS 406 DSE3 Medical Information Systems and Services

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

Unit 1: History of medicine, Medical terminologies, .National Library of Medicine Classification Scheme

Unit 2: Index Medicus. MeSH as indexing vocabulary tool. MEDLARS and MEDLINE, PubMed tutorial

Unit 3: Role of NLM, WHO, ICMR. Efforts of National Informatics Center: IndMed, MedInd and OpenMed.

Unit 4: Medical Librarians' Discussion Forum. Health Sciences Network. OSDD International Collaborative effort by CSIR; Health related library & information services in India and abroad

LIS 406 DSE4 Legal Information System and Services

4L+0T+0P= 4 Credits Classes =60

Marks= 40+10

Unit 1: Legal Information System & Services; Introduction to Indian Legal System

Unit 2: Web Recourses on Legal Information System in India & Other Countries.

Unit 3: History of Legal Information Services; Institutes for Legal Studies.

Unit 4: Growth and development of Legal Information System; Different categories of Legal Issue & Topics

LIS 406 DSE5 Manuscript and Archival System and Services

4L+0T+0P= 4 Credits

Classes = 60

Marks=

40+10

Unit 1: Study of manuscripts—special features. History of writing and writing materials. Different ways of collecting manuscripts. Manuscript as source material for study and research. Editing of manuscripts.

Unit 2: Processing and organisations of manuscripts : classification, cataloguing and indexing. Preservation and restoration. Existing collections: Local, regional and national.

Unit 3: Definition of archives. Different types of archival centres. History and development of archival centres. Importance of archival materials as an information source. Different kinds of archival materials. Organisation and management of archival materials.

Unit 4: Planning; Environmental control and effective building design, furniture and fittings.; Care and preservation of archival materials—objective and purpose. Causes of deterioration—Physical, chemical, atmospheric, pollution and other environmental conditions. Biological enemies of materials. Special storage techniques and treatment—machine readable format, microfilming, databases, Rehabilitation of documents—Techniques of repair and restoration, Issues of copy right. Source material on archives. Role of UNESCO and other agencies.

LIS 406 DSE6 Industrial Libraries and Information System

4L+0T+0P= 4 Credits

Classes = 60

Marks= 40+10

Unit1: The industry: types and structure. Role of library information centre: structure ,function, services and products of different categories of industrial libraries programmes at the local, national, and global levels. Networking and resource sharing: evaluation of systems and services, SENDOC. Information transfer and dissemination.

- Unit 2:** Application of management ideas and techniques to industrial libraries and information centres. Systems approach to planning- objectives, organizational structures, functions, problems, interlinking, environment, preventive and corrective measures. Growth and development of information resources, information services, personnel, finance. Professional organizations: chambers of Commerce, Industrial houses.
- Unit 3:** Special classification and indexing systems. Indexes and indexing systems for retrieval. Principles of classification in organization of information. Trade literature, patents, standards and technical reports, bulletins.
- Unit 4:** Users and non users: . Information needs of users, information transfer mechanism, information services: References, Current awareness, condensation and consolidation services and products thereof, presentation of information: marketing computerized information services

LIS 406 DSE7 Informetrics

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

- Unit 1:** (a) Measurement and quantitative aspects of social phenomena activities, Units of measurement, Counting and measurement, Measuring information, units of information – different proposition. Documents and parts of Document as unit of information, Bibliography data as representing cultural output.
(b) History and development of library statistics, Statistical bibliography, Librametrics, bibliometrics, informetrics, scientometrics, scientoinfometrics Definitional problems.
- Unit 2:** (a) Information production process (IPP) and its significance. Branches for informetrics.Theoretical and empirical approaches to informetrics and scientometrics, informetrics laws.
(b) Bibliographic scattering distribute (ranking and ranked distributions). Zipfian and Gaussian distribution compared. Mean relative scattering and information laws.
- Unit 3:** Citation phenomena, Citation process and citation analysis. Co-citation, co-word and co-reference (generalized bibliographic coupling) studies.
- Unit 4:** (a) Growth and obsolescence studies
(b) Diffusion studies. Relations of growth, scattering and diffusion.
(c) Application of informetrics, science mapping, bibliometrics and scientometrics indicators, Limitation and validity of informetrics methods

LIS406 DSE8 Children's Library system

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

- Unit 1:** Importance of children's libraries. Libraries for children as sociocultural centre. Role of children's libraries in the community development programme. Importance of school libraries.
- Unit 2:** Reading habit and reading materials in children's libraries. Storytime in children's libraries. Information literacy and teaching aids in children's libraries. Importance of children's literature.
- Unit 3:** Institutional Digital Library for children and young adults. Services in children's libraries, services for differently abled children, creative information service for children's libraries.
- Unit 4:** Makerspaces, creative classrooms. Safe environmental approaches in children's libraries, Psychological techniques of library work with children.

LIS406 DSE9

IPR Management in Libraries

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

- Unit 1 :** IP Basics : Defining IP, IPR, Kinds of IPR, protection and management. Basics of Patent, Patent Document, Indian Patent Act and other Legal Obligations, Patent databases, Basics of

Copyright, History of Copyright, Philosophy and Theories of Copyright, Legal Instruments-National & International

Unit 2 : Copyright in Scholarship: Authorship and rights, Copyright in Publishing, Copyright Licensing and Assigning, Digital learning, Creative Commons, Open Data Licenses, Understanding of fair use, Specific exceptions for teachers and librarians, Piracy & digital piracy, Plagiarism, Copyright Protection Technologies, Basics of copyright permission

Unit 3 : Copyrights and Multimedia : Copyright for Data, Image, music & Audio, Film & Video, Broadcasting & Webcasting, social media, Software & Open Source Software

Unit 4: Patent Searching, Fair Use Analysis, Framework for Analyzing for Copyright Problem, Case Study

LIS406 DSE10

Library and Information Science Education

4L+0T+0P= 4 Credits

Classes =60

Marks= 40+10

Unit 1 : Manpower development: LIS education vis-à-vis social and economic development. Manpower needs and manpower studied. Structure and function of library personnel- task analysis. Redefinition of jobs, identification of supporting function including those which may be contributed by other professional. Technical expertise and specialist. Manpower policies. Levels of education of training: Certificate, Diploma, Bachelor, Masters, MPhil and PhD programmes. Library science as optional subject in schools and colleges. Informal and short-term programmes. Refresher and in-service programme and continuing education programmes.

Unit 2: Curriculum design methodology: formulating objectives: length of the curriculum. Admission requirements. Content-foundation: core courses, elective, optional, practical and job experiences. System of examination and certification. Evaluation of courses and contents.

Unit 3: Teaching methods and techniques: Lecture-cum-demonstration, tutorials, group discussions, seminars, colloquia, case studies, assignment, management games, role playing, observation and field studies, participative learning by studies. Teaching aids: Charts, tables, diagrams, specimens, models, audio-visual aids, radio talks. TV lessons etc. Learning material: Growth of library literature in India. Books and monographs, programmed texts, audio-visual materials, computer simulations, etc. Teaching personnel: Cadre, qualification, recruitment, emoluments, promotions, avenues for personal development, training for teachers, teaching skills, innovation in teaching, practicing librarians' participation in teaching. Cooperation and coordination among library schools, university library and library schools, allied departments in university and research programs in the university.

Standardization: Administration, staff, finance, library, teaching aids, buildings, student intake, accreditation. Research in library and information science in India: Evaluation of research done in India. Research activities, Area of Research

Unit 4: Research method: International surveys, case studies, etc.; assumptions and validity of comparisons, International comparative studies, regional studies, and country comparisons: national and regional non-library factors; explanatory theories (e.g. influence of climate, orality and literacy). International diffusion of library theories and techniques: adoption of innovations, adaptation, rejection, International influences: transatlantic, Anglo-American, Continental European, colonial, post-colonial, Role of cultural and information agencies (USIS, British Council etc.) and philanthropic foundations; Carnegie Corporation, Andrew W. Mellon Foundation, Soros, etc.; Book donations (Ranfurly, Sabre, etc.), International non-governmental organisations in LIS-IFLA, FID, regional library associations, specialised international associations

LIS406 DSE11 Library architecture

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

Unit 1: History of library buildings, modular buildings, planning process, building program, space planning, site selection, brief. Green library building

Unit 2: Library lighting, lighting design, lighting standards, theories of light.

Unit 3: Security, International construction and design codes, Library Building Award program.

Unit 4: Furniture selection, Equipment, Ambience Ergonomics, Colour. Barrier free library building for providing access to all types of impaired users. Standards.

LIS406 DSE12 Agricultural Information Systems and Services

4L+0T+0P= 4 Credits Classes =60 Marks= 40+10

Unit 1: Growth and development of agricultural education and research in India. Role of libraries in agricultural education research and extension. Recent growth and development of agricultural libraries in India.

Unit 2: Special information needs of agricultural faculty, research staff extension personnel and stations.

Unit 3: Specialized collection and information sources: agricultural databases, agricultural information centres – national and international.

Unit 4: Resource sharing and networking in agricultural libraries and information centres.

LIS406 DSE13 Public Library Systems and Services

4L+0T+0P= 4 Credits Classes =60

Marks= 40+10

Unit 1: Importance of public libraries; role of public library in literacy and mass education. Public library movement in India, RRRLF and Public libraries in India. IFLA/UNESCO manifesto (other guidelines for public library services)

Unit 2: Public library legislation in India: Salient features of various public library acts.

Unit 3: Public library finance, budgeting, manpower development, collection development, library services to special groups of people.

Unit 4: Networking, library automation, detailed study of some important public libraries of India and world. Recent development in public libraries in India.

LIS406 DSE14 Comparative Librarianship

4L+0T+0P= 4 Credits Classes = 60

Marks= 40+10

Unit 1: Emergence of Librarianship as a profession. From librarianship to information science. Impact of information technology, Professional education-USA, UK and India. Contribution of Dewey and Ranganathan. Role of UGC in programming Library Information Science Education. Role of Professional bodies.

Unit 2: International librarianship – terminology, conceptual structure of international librarianship. Role of cultural and information agencies. Book donations, Regional library associations, specialised institutional associations.

Unit 3: Comparative librarianship- Definition, Motives/rationales, Internationalisation of LIS education, Identify and appreciate factors outside librarianship, Techniques, technologies, systems; Economic, cultural, political factors; Filtering; Learning from developing countries and/or developed countries- how and what of it; Aid programmes; International Librarianship: terminology, definitions, scope, conceptual structures of international librarianship, Sources: Journals and other sources in the field ; Values and orientations: Internationalism, social responsibility, third world solidarity; American, British, European and Soviet approaches.

Unit 4: International surveys, case studies, international comparative studies, regional studies and country comparisons.

LIS 407 DSE Discipline Specific Electives

(Project on the subject chosen under LIS406DSE)

0L+3T+0P =3 Credits Classes = 90 Marks=50

- LIS 407 DSE1 Academic Library Systems and Services
- LIS 407 DSE2 Community Information Systems and Services
- LIS 407 DSE3 Medical Information Systems and Services
- LIS 407 DSE4 Legal Information System and Services
- LIS 407 DSE5 Manuscript and Archival System and Service
- LIS 407 DSE6 Industrial Library and Information Services
- LIS 407 DSE7 Informetrics
- LIS 407 DSE8 Children's Library system
- LIS 407 DSE9 IPR Management in Libraries
- LIS 407 DSE10 LIS Education
- LIS407 DSE11 Library architecture
- LIS407 DSE12 Agricultural Information Systems and Services
- LIS407 DSE13 Public Library Systems and Services
- LIS407 DSE14 Comparative Librarianship

(Students have to submit a project report on visiting such Library(ies) /Information Centre(s) /System(s). Evaluation will be made on basis of the presentation of this report before a panel of experts suggested by the BOS)

LIS 408CC Internship

0L+4T+P = 4Credits Marks= 50

Students are required to undergo internship in different libraries selected by the department. The duration of internship will be of at least one month. Each student will be paid monthly stipend of Rs 5000/- only.

Reading Lists

Semester I

LIS 101 CC Library, Information and Society

- BAWDEN(David) and ROBINSON(Lyn). Introduction to Information Science. July 2012
- BUNCH (Allan). The basics of information work. 1984. Clive Bingley; London.
- CHOWDHURY(G G), BURTON(Paul F), MCMENEMY(David) and POULTER(A). Librarianship An introduction Dec 2007
- GARDNER (Frank M). Public library legislation: a comparative study. 1971. UNESCO; Paris.
- GEORGE (K M),Ed. Indian libraries: trends and perspectives. 1985. Orient Longmans; Calcutta.
- GUHA(B). Documentation and information: services, techniques and systems.1983. 2nd rev. ed.
- GUPTA(B M),Ed.. Handbook of libraries, Archives and information centre in India. V 1-13. 1991;New Delhi
- HAY WOOD T: Info-Rich Info-poor: Access and exchange in the global information society.1995.

INDIA. MINISTRY OF EDUCATION. Report of the Advisory Committee for Libraries. 1959. Manager of publications; Delhi.

KAULA (P N). National library of India: a critical study. 1971.

KENT A, ed. : Encyclopaedia of library and information science.VI-62.

KHANNA (J K). Library and society. 1987. Research publications; Kurukshetra.

MACHLUP(F). Knowledge; its creation, distribution and economic significance. VI, 1980; V2, 1982; V3. 1984.

MAHAPATRA (P K). Library and information science: an introduction. 1989. World Press; Calcutta.

MANGLA (P B), SARDANA (J L) and SING (Mohinder), Ed. Fifty years of librarianship in India. 1983. ILA; Delhi.

MARTIN (William J). Community Librarianship: changing face of public libraries. 1989. Clive Bingley; London.

MEADOWS (Jack), Ed. Knowledge and communication: essays on information chain. 1991. Clive Bingley; London. .

MUKHERJEE (A K). Librarianship: its philosophy and history. 1966. Asia; Bombay.

RANGANATHAN (S R) And NEELAMEGHAN (A), Ed. Public library system. 1972. Sarada Ranganathan Endowment for Library Science; Bangalore.

RANGANATHAN (S R), Ed. Book service for all. 1969. Asia; Bombay.

RANGANATHAN (S R). A librarian looks back: an autobiography.1992. Asia; Bombay

RANGANATHAN (S R). Five laws of library science. 1991. Asia; Bombay.

RANGANATHAN (S R). Preface to library science. 1948. University of Delhi; Delhi.

SHARMA (Pandey S K). Library and Society.1992 .2nd rev. &enl. Ed . Ess Ess; New Delhi.

SHERA (J H) Sociological foundation of Librarianship. 1970. Asia; Bombay.

THOMPSON (Carl) et al. Adult education activities for public libraries. 1950. UNESCO; Paris.

UNESCO.National libraries: there problem and prospects. 1960. UNESCO;Paris.

VENKATAPPAIAH (V). Library legislation in India.2v. 1990.

LIS 102 CC Resource Description I (Theory)

CHAN (Lois Moi). Cataloguing and classification: an introduction. 1985. McGraw Hill; New York.

COATES (E J). Subject catalogues: heading and structures. 1960. Library Associations; London.

CUTTER (Charles A). Rules for a dictionary catalogue. Library Association;America
DRTC. Seminar on cataloguing. 1970. DRTC; Bangalore.

HORNER (J). Cataloguing.

HUNTER (E J) and BAKEWELL (KGB). Cataloguing. 1990. Clive Bingley; London.

HUNTER (E J). Computerized cataloguing. 1990. Clive Bingley; London.

MANN (Margaret). Introduction to cataloguing and classification of books. 1943. 2nd ed. ALA; Chicago.

MOHAMMAD HAROON. Cataloguing of Indian Muslim names. 1984. IBB; Delhi.

NEEDHAM (C D). Organizing knowledge in libraries: an introduction to classification and cataloguing. 1971. 2nd ed. London.

OLDING (RK), Ed. Heading in library cataloguing. 1967. New Delhi.

PIGGOTT (M). A topography of cataloguing. 1988. LA; London.

RANGANATHAN (S R). Headings and canons: comparative study of five catalogue codes. 1955.

SENGUPTA (B). Cataloguing: its theory and practice. World Press; Calcutta.

SHARP (H A). Cataloguing. 1964.5th ed. Allied; Bombay.

LIS 103 CC Resource Description I (Practice)

ANGLO American Cataloguing Rules. 2nd rev ed. (AACR 2R)

LIBRARY of Congress Subject Heading List. 1995. 15th ed.

RANGANATHAN (SR). Cataloguing practice. Sarada Ranganathan Endowment for Library Science; Bangalore.

RANGANATHAN (SR). Classified Catalogue code with additional rules for dictionary catalogue code. 1964. 5th ed. Asia; Bombay.

SEARS List of Subject Headings. 1996. 16th ed.

LIS 104 CC Knowledge Organization I (Theory)

AGARWAL (D S).Lectures on universe of knowledge. 1985. Academic; Delhi.

CHAKRABARTI (B). Library classification theory. 1994. World Press; Kolkata.

CHAN (L M). Cataloguing and classification: an introduction. 1985. McGraw Hill; New York.

FOSKETT (A C). The subject approach to information. 1982. 4th ed. Clive Bingley; London.

KAULA (P N). Treatise on colon classification. 1985. Sterling; Delhi.

KUMAR (Krishan). Theory of classification. 1991. Vikas; Delhi.

MALTBY (A), Ed. Sayer's manual of classification for librarians. 1975. 5th ed. Andre Deutsche; London

MILLS (J). Modern outline of library classification. 1962. Asia; Bombay.

NEEDHAM (C D). Organising knowledge in libraries: introduction to library classification and cataloguing. 1971. Andre Deutsche; London.

OHDEDAR (A K) and SENGUPTA (B). Library classification. 1977. World Press; Kolkata.

PALMER (B I) and WELLS (A J). Fundamentals of library classification. 1951. George Allen and Unwin; London.

PARKHI (R S). Decimal classification and colon classification: a perspective. 1964. Asia; Bombay.

PHILLIPS, (WH). Primer of book classification. 1953. The Library Association; London

RANGANATHAN (S R). Elements of library classification. 1989. 3rd ed. Sarada Ranganathan Endowment for Library Science; Bangalore.

RANGANATHAN (S R). Prolegomena to library classification. 1967

RANGANATHAN, (SR). Descriptive account of colon classification. 1967. Asia; Bombay.

SAYERS (W C B). Introduction of library classification. Rev by Arthur Maltby. 9th ed. 1958. Grafton; London.

WYNAR (B S). Introduction to cataloguing and classification. 7th ed. 1985. Libraries Unlimited; New York.

LIS 105 CC Knowledge Organization I (Practice)

CHAN (L M). Cataloguing and classification: an introduction. 1985. McGraw Hill; New York.

DEWEY (Melvil). Dewey Decimal Classification. 1996. 21st ed. Forest Press; New York.

KAULA (P N). Treatise on colon classification. 1985. Sterling; Delhi.

Universal Decimal Classification. Medium ed.

LIS 106 CC Information Sources, Services and Systems (Theory)

BRADFORD (S C). Documentation. 1948. Crosby Lookwood; London.

BUNCH (Allan). The basics of information work. 1985. Clive Bingley; London.

CHAKRABARTI (A R) and CHAKRABARTI (B). Indexing : Principles, processes and products. 1983. World Press; Calcutta.

CHANDLER (G). How to find out: a guide to sources of information for all. 1974. Pergamon; Oxford.

FOSKETT (D J). Classification and indexing in the social sciences. 1974. Butterworths; London.

GROGAN (D). Grogan's case studies in reference work. 6v. 1987. Clive Bingley; London.

GROGAN (D). More case studies in reference work. 1972. Clive Bingley; London.

GROGAN (D). Practical reference work. 1979. Clive Bingley; London.

GUHA (B). Documentation and information services: techniques and systems. 1983. 2nd rev. ed. World Press; Calcutta

KATZ (W A). Introduction to reference work. 2v. 1969. McGraw-Hill; New York.

KAY ANN CASSELL and UMA HIREMATH: Reference and Information Services An introduction. 4th ed. June 2018

KUMAR (Girja) & KUMAR (Krishan). Philosophy of user education. 1983. Vikas; New Delhi.

MUKHERJEE (A K). Reference work and its tools. 1975. 3rd ed. World Press; Calcutta.

RAJAN (T N). Ed. Indexing systems. 1981. IASLIC; Calcutta.

RANGATHAN (S R). Ed. Documentation and its facets. 1963. Asia; Bombay.

RANGATHAN (S R). Ed. Reference service. 1961. 2nd ed. Asia; Bombay.

SHERA (Jesse H). Documentation and the organization of knowledge. Ed. By L. J. Foskett. 1966. Crosby Lockwood; London.

SINGH (Sewa): Handbook of International sources on reference and information. 2001

SINGH (Sewa): Manual of reference and information sources. 2004.

VERMA (A K). Trend in subject indexing. 1984. Mittal; Delhi.

VICKERY (B C). Information systems. 1973. Butterworths; London.

LIS 107 CC Information Sources, Services and Systems (Practice) (same as LIS106CC)

LIS 108 CC Library Laws and Ethics

BURGESS(John T F) and KNOX(Emily J M) ed. Foundations of Information Ethics
 CHAUDHURI(SabuJ Kumar): An Introduction to Fair Use and Copyright Management of Universities in India, August. 2017
 CORNELIUS(Ian): Information Policies and Strategies. March. 2010
 OPPENHEIM(Charles) and KORN(Naomi): Information Law-Compliance for librarians, knowledge managers and information professionals. Oct 2019
 OPPENHEIM(Charles): The No-nonsense Guide to Legal Issues in Web 2.0 and Cloud Computing.2012
 PEDLEY(Paul). Essential Law for Information Professionals, 4th ed. July. 2019
 RAINS(Stephen A.): Coping with Illness Digitally. 2018

LIS 109 CC ICT Applications (Theory)

BOSS (Sanjoy K). Hardware and Software of personal computers. 1991.Wiley Eastern; New Delhi
 HUNT (Roger). and SHSLIE (John). Computers and commonsense. 1990. 4th ed. Prentice-Hall; New Delhi.
 LAST (R). MS DOS revealed. 1991. Galgotia; New Delhi.
 MAHAPATRA (P K). The Computer in Library Services. 1985. World Press; Calcutta.
 NEW PETER (G). Reprography for librarians. 1975. Clive Bingley; London .
 RAJARAMAN (V). Fundamentals of computers. 1991. Prentice – Hall; New Delhi.

Semester II

LIS 201 CC Library Management

ANDERSON (R). Management information systems and computers: an introduction. 1986.
 Application of management techniques to library and information systems, 12th IASLIC conference, Roorkee, 1979.
 Conference on the corporate approach to library management. Proceeding ed by P.A.Thomas and V.A.Woard. Aslib; London.1974.
 JONES (Noragh) and JORDAN (Peter). Case studies in library management . 1988. Clive Bingley; London.
 KHANNA (J K) . Fundamentals of library organization . 1984 . Ess Ess ; New Delhi.
 MITTAL(R L) . Library administration: theory and practice. 1983. 5th ed. Metropolitan; New Delhi.
 MOOKHERJEE (S K) and SENGUPTA (B). Library organization and library administration . 1972. World Press; Calcutta.
 NARAYANA (G J) . Library administration. 1959. 2nd ed. Asia house; Bombay.
 RANGANATHAN (S R) . Library manual.
 SEETHARAMA (S) . Guidelines for planning of libraries and information centers .1990 .
 SINGH (M). Library and information management: theory and practice. 1983 . IBT; Delhi.

LIS 202 CC Information Retrieval I

CHOUDHURY (G G).Information retrieval system: characteristics, testing and evaluation. 1966. John Wiley.
 CHOUDHURY (G G).Information retrieval. 1994. IASLIC.
 CHOUDHURY (G G).Introduction to modern information retrieval. 1999. The Library Association.
 FOSKETT (A C): Subject approach to information. 6th Revised Ed . 2012
 KENT (A). Information analysis and retrieval. 1971. Becker and Heys.
 KUMAR (P S G).Knowledge organization, information processing &retrieval. 2003. BRPC.
 LANCASTER(F W): Indexing & abstracting in theory and practice. 3rd Ed. 2003
 RAJAN(T N): Indexing Systems : concepts, models and techniques. 1981
 ROWLEY(J E) : Abstracting and indexing. 2nd ed. 1990.
 VICKERY (B C).Techniques of information retrieval. 1970. Butterworth.

LIS 203 CC Resource Description II (Theory)

CHAN (Lois Moi). Cataloguing and classification: an introduction. 1985. McGraw Hill; New York.
 COATES (E J). Subject catalogues: heading and structures. 1960. Library Associations; London.
 CUTTER (Charles A). Rules for a dictionary catalogue. Library Association;London.
 DRTC. Seminar on cataloguing. 1970. DRTC; Bangalore.
 HUNTER (E J) and BAKEWELL (KGB). Cataloguing. 1990. Clive Bingley; London.
 HUNTER (E J). Computerized cataloguing. 1990. Clive Bingley; London.
 MANN (Margaret). Introduction to cataloguing and classification of books. 1943. 2nd ed. ALA; Chicago.

MOHAMMAD HAROON. Cataloguing of Indian Muslim names. 1984. IBB; Delhi.
NEEDHAM (C D). Organizing knowledge in libraries: an introduction to classification and cataloguing. 1971. 2nd ed. 1971. London.
OLDING (RK), Ed. Heading in library cataloguing. 1967. New Delhi.
PIGGOTT (M). A topography of cataloguing. 1988. LA; London.
RANGANATHAN (S R). Headings and canons: comparative study of five catalogue codes. 1955.
SENGUPTA (B). Cataloguing: its theory and practice. World Press; Calcutta
SHARP (H A). Cataloguing. 1964. 5th ed. Allied; Bombay.

LIS 204 CC Resource Description II (Practice)

DAILY (J.E). Organizing Non-print Materials. 1986. Marcel Dekker; New York.
FLEISCHER, (Eugene) and GODMAN, (Helen). Cataloguing Non-print Media : A Manual based on the Anglo-American Cataloguing Rules II. 1980. Neal-Schuman; New York.
FROST (Carolyn O). Cataloguing Non-book Materials: Problems in Theory and Practice. 1983. Libraries Unlimited; Littleton Colo.
HORNOR (John Leonard). Special Cataloguing with Particular Reference to Music, Maps, Serials and the Multimedia Computerized Catalogue. 1973. Clive Bingley; London.
ROUT (R K) and B K, (Choudhury). Illustrative Examples in Cataloguing of Non-book Materials (According to AACR2, 1988 R). 1996. Reliance Publishing House; New Delhi.

LIS 205 CC Knowledge Organization II (Theory)

AGARWAL (DS). Lectures on universe of knowledge. 1985. Academic; Delhi.
CHAN (LM). Cataloguing and classification: an introduction. 1985. McGraw Hill; New York.
FOSKETT (AC). The subject approach to information. 1982. 4th ed. Clive Bingley; London.
KAULA (PN). Treatise on colon classification. 1985. Sterling; Delhi.
KUMAR (Krishan). Theory of classification. 1991. Vikas; Delhi.
MALTBY (A), Ed. Sayer's manual of classification for librarians. 1975. 5th ed. Andre Deutsche; London
MILLS (J). Modern outline of library classification. 1962. Asia; Bombay.
NEEDHAM (CD). Organizing knowledge in libraries: introduction to library classification & cataloguing. 1971 Andre Deutsche; London.
OHDEDAR (AK) AND SENGUPTA (B). Library classification. 1977. World Press; Calcutta.
PALMER (BI) AND WELIS (AJ). Fundamentals of library classification. 1951. George Allen & Unwin; London.
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Semester III

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LIS 303 CC Quantitative Research Methods

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LIS 307 CC Information Processing

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LIS 402 CC Digital Content Management

ANDREWS(Judith) , LAW(Derek). Digital Libraries: Policy, Planning and Practice
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LESK(Michael). Understanding Digital Libraries.2004
WITTEN(Ian H.), BAINBRIDGE(David) and NICHOLS(David M.) . How to Build a Digital Library. 2010

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FOROUZAN(Behrouz A.). Data Communications and Networking.2017
STALLINGS(W). Computer Networking With Internet Protocols and Technology.2003
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JACOB(Neil)S.Open Access. Key Strategic, Technical and Economic Aspects.2006
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LIS 406 DSE Discipline Specific Electives (Theory)

LIS 406 DSE1 Academic Library Systems and Services

BUDD (J M). The changing academic library : operations, culture, environments. 2005. American Library
Association.
DHIMAN (A K) and SINHA(S C). Academic Libraries. 2002. Ess Ess; New Delhi.
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BUNCH (A). Community information services: meaning, origin and scope. 1982. Clive Bingley; London.
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CHENV (H). Medical Informatics: knowledge management and data mining in biomedicine 2006. Springer.

LIS 406 DSE4 Legal Information System and Services

BERRING(R). Cyberspace and traditional: legal information transmogrified. 2008. University of California.
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LIS 406 DSE5 Manuscript and Archival System and Services

BROOKS (P C). Research in archives: the use of unpublished primary sources.1989. University of Chicago Press.
COOK (Michael). Archives and the computer. 1988.Butterworth.
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BURKETT (Jack). Industrial and related library and information services in the United Kingdom, 3rd Ed.1972.The Library Association; London.
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LIS406 DSE8 Children's Library system

BENNE(Mae). The central children's library in metropolitan public libraries. 1977. School of Librarianship, University of Washington.

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LIS406 DSE9 IPR Management in Libraries

BAINBRIDGE(David).Software Copyright Law.1999

CHAUDHURI(Sabuj Kumar): An Introduction to Fair Use and Copyright Management of Universities in India.2017, August.

CORNISH(Graham P).Copyright-Interpreting the law for libraries, archives and information services. Revised 6th edition.2019, June.

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LIPINSKI(Tomas A.): The Complete Copyright Liability Handbook for Librarians and Educators.2006

PEDLEY(Paul): Copyright Compliance-Practical steps to stay within the law

SOPLE(Vinod V): Managing International Property: The Strategic Imperative. 2014

LIS 406 DSE10 LIS Education

BRAMLEY (Gerald). World trend in library education.

BUCHIWGHAM (R A), ed. Education and large information system.

DALECLUFF (E). Library education and employers expectation.

KUMAR (P S G), ed. Library and Information manpower development. 1988.Indus;New Delhi.

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LIS406 DSE11 Library Architecture

DESMUKH (P P). Standards of library and information services. 1990. ABC

METCALF (K D).Planning academic and research library building.Rev.ed.1986.ALA; Chicago.

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LIS406 DSE12 Agricultural Information Systems and Services

ALANCHARD (J R) and FARREL (Lois). Guide to sources for Agricultural and Biological Research. 1981.University of California Press; Bareley .p.735.

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WORLD BANK: ICT IN AGRICULTURE-Connecting Smallholders to Knowledge, Networks, and Institutions. 2011

LIS406 DSE13 Public Library Systems and Services

HERNON (Peter) and MATTHEWS (Joseph R): Reflecting on the Future of Academic and Public Libraries. 2013

KENDRICK (Terry): Developing Strategic Marketing Plans That Really Work-A toolkit for public libraries. 2006

MCMENEMY (David): The Public Library. 2008

MCMENEMY (David) and POULTER (Alan): Delivering Digital Services-A handbook for public libraries and learning centres. 2005

LIS 406 DSE14 Comparative Librarianship

DANTON (J P). The dimensions of comparative librarianship. 1973. ALA; Chicago.

KAWATRA (P S), Ed. Comparative and international librarianship. 1987. Sterling; New Delhi.

LIS 407 DSE Discipline Specific Electives (Project on the subject chosen under LIS406DSE)

LIS 407 DSE1 Academic Library Systems and Services

LIS 407 DSE2 Community Information Systems and Services

LIS 407 DSE3 Medical Information Systems and Services

LIS 407 DSE4 Legal Information System and Services

LIS 407 DSE5 Manuscript and Archival System and Services

LIS 407 DSE6 Industrial Library Systems and Services

LIS 407 DSE7 Informetrics

LIS 407 DSE8 Children's Library system

LIS 407 DSE9 IPR Management in Libraries

LIS 407 DSE10 LIS Education

LIS 407 DSE11 Library Architecture

LIS 407 DSE12 Agricultural Information Systems and Services

LIS 407 DSE13 Public Library Systems and Services

LIS 407 DSE14 Comparative Librarianship

(Same as respective DSE papers under LIS406)

LIS 408 CC Internship