



**University of Rajasthan
JAIPUR**

Faculty of Education

**Syllabus for
MASTER OF LIBRARY AND INFORMATION
SCIENCE
(First & Second Semester)**

(Under Choice Based Credit System)

Session-2023-24

Rj/10/23
Dy. Registrar (Acad.)
University of Rajasthan
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SYLLABUS

MASTER OF LIBRARY AND INFORMATION SCIENCE

2023-2024

OBJECTIVES:

The objectives of the Master of Library and Information Science (MLIS) (Two Semesters in One Year) Programme are to:

- impart the students thorough understanding of patterns of knowledge development and its organization.
- train the students in the advanced skills of knowledge organisation, gathering, processing, and retrieval.
- train the students in information knowledge analysis, consolidation and repackaging.
- train the students with the latest trends of ICT applications in information environment including networks and communication systems.
- train the students in the analysis, planning and management of the systems of library and information centres.
- provide an understanding of research methods and activities of research organizations.
- acquaint the students with the activities and services of National, Regional and International Information Systems and Programmes

O.144 (4): For all examinations (including Library Science) in the Faculty of Education: A candidate shall be required to put in a minimum of 75% attendance at the lectures and 75% at the practicals, separately. A provision of condonation of shortage in attendance is to be followed as per university rules.

O.329-K2: The duration of the course will be one academic year (July to June) of two semesters—1st semester (1st July to 31st December) and 2nd semester (1st January to 30th June)

O.329-K3: Candidates for admission to the course should possess the degree of Bachelor of Library and Information Science of the University or of any other University recognized by the Syndicate for the purpose or a post - graduate Diploma in Library Science of a recognized University with a minimum of 50% marks in the said degree or diploma examination.

O.324-K4: Omitted.

O.329-K5: A candidate who has completed a regular course of study and has attended at least 75% of the lectures delivered and has produced a certificate from the competent authority to the effect that he has satisfactorily completed his practical work, will be entitled to take the examination and no exemption from the minimum attendance will be given on ground of either sickness or any personal domestic reasons whatsoever.

SCHEME OF EXAMINATION:

- The Examination is based on (a) End of Semester Examination (EoSE), (b) Continuous: Assessment (CA), (c) Choice Based Credit System, and (d) Relative Grading and Semester Grade Point Average and Cumulative Grade Point Average system as provided in O.199F 1 to O.199F 5.
- A candidate for the examination shall be required to offer the papers mentioned below. The maximum marks shall be noted against each paper.
- The duration of examination of each theory paper and practical paper shall be 3 hours.

First Semester

S. No.	Subject Code	Course Title	Course Category	Credit	Max. Marks	
					CA	EoSE
1.	MLS-701	Basics of Research and Statistical Methods (Theory)	CCC	6	100	100
2.	MLS-702	Information and Communication Technology (Theory)	CCC	6	100	100
3.	MLS-703	Knowledge Organisation and Information Processing (Theory)	CCC	6	100	100
4.	MLS-711	Knowledge Organization and Information Processing: UDC (Practical)	CCC	8	100	100
5.	Elective-A01	Information Sources and Literature in Natural Sciences (Theory)	ECC	6	100	100
	Elective-A02	OR Information Sources and Literature in Social Sciences (Theory)				

SYLLABUS

First Semester

MASTER OF LIBRARY AND INFORMATION SCIENCE 2023-2024

Paper: MLS-701: Basics of Research and Statistical Methods (Theory)

Max. Marks: 100

1. Concept of Knowledge, Types of Knowledge, Attributes of Knowledge (Subject), Modes of Formation of Subjects
2. **Patterns of Development of Knowledge**—Modes of Thinking: Authoritative, Speculative and Positivistic and their impact on the development of knowledge.
3. **Research** –Definition, Nature, Characteristics, Purpose, Types of Research - Basic, Applied, Interdisciplinary. Problems and Barriers in Research in India and their likely Solutions.
4. **Methods of Research**- Scientific, Historical, Descriptive/Survey, Case study method and Ranganathan's, Spiral of Scientific Method.
5. **Research Design**: Need and purpose, Formulation, Hypothesis- Definition, types, sources, functions
6. **Collection of Data**: Sampling, Schedules, Questionnaires, Interview, Observations, Rating Scales, Validity & Reliability of Instruments of Data Collection and Analysis, Variables, Primary and Secondary Sources of Data.
7. **Statistical Techniques**: Measures of central tendency: Mean, Mode and Median.
8. **Presentation of Data**: Purpose and Importance, Tabulation, Diagrammatic and Graphic, Report writing

Paper: MLS-702: Information and Communication Technology (Theory)

Max. Marks: 100

1. **Information and Communication Technology**: Concept, definition and components of IT. Telecommunication Media: Twisted Pair, Coaxial cable, Optical Fibre, Radio Transmission, Microwave Transmission, and Satellite Transmission; Telecommunication Signals: Analog and Digital; Switching Techniques: Circuit switching, Packet switching, and Cell switching.

2. **Network and Networking:** Computer Network- Introduction, Types – LAN, MAN, WAN; Topology- Bus, Star, Ring, Tree, Mesh and Token ring, Network; Devices- Network Interface Card, Repeater, Bridge, Hub, Switch, Router, and Gateway.
3. **Internet:** History, Protocols, tools and Services: WWW, URL, Search Engines and Web Browsers, Email, FTP, TELNET, IRC, Bulletin Boards. Uses of Internet. WEB 2.0 Technologies
4. **Network Security:** Introduction. Malicious Software: Virus, WORMS, SPAM, Trojan Horse. Hacking. Security Methods: Firewall, Anti-virus software.
5. **Modern Techniques in ICT:** Concept of artificial intelligence, RFID, Barcode, Cloud Computing, Internet of Things (IoT),

**Paper: MLS-703: Knowledge Organisation and Information Processing
(Theory)**

Max. Marks: 100

1. **Library Classification:** Salient features of UDC. Formation of Isolates-Devices, Notational Techniques in CC and UDC. Purview of CC (7th Edition).
2. **Canons for Classification: Idea plane (15)** -- Canons for characteristics (4); Canons for succession of characteristics (3); Canons of Array (4); Canons for Chain (2); Canons for Filiatory sequence (2). Verbal Plane (4). Notational Plane (24) -- Basic Canons for notation (12): Canons for mnemonics (5); Canons for growing universe (4).
3. **Vocabulary Control:** Need, Purpose, Functions, types and characteristics. Vocabulary Control Tools: Subject Headings: Library of Congress Subject Headings and Sears List of Subject Headings. Thesaurus: Concept, Features, Structure and Construction. Hierarchical and non-hierarchical relationship between terms in a thesaurus. Concept of taxonomy, folksonomy and ontology.
4. **Assigned and Derived Indexing. Pre and Post Coordinate Indexing Systems:** Chain Indexing, PRECIS, POPSI, KWIC, KWOC, KWAC and WADEX. Citation Indexing: Features of Scopus, Web of Science and Google Scholar. Uniterm Indexing.
5. **Information Storage and Retrieval Systems (ISARS):** Concept, definition, types, characteristics, components of ISARS. Library information retrieval systems: Web-OPAC, digital libraries. Federated Search: Concept and Features. Web-Scale Discovery System (WSDS). Evaluation of an Information Retrieval System: Coverage, Recall, Precision, Relevance, Response time, Fallout and Generality.
6. **Current Trends in classification and Cataloguing:** concept of Semantic Web, FRBR and RDA.

**Paper: MLS-711: Knowledge Organisation and Information Processing:
UDC (Practical)**

Max. Marks: 100

1. Classification of documents by Universal Decimal Classification (UDC) 3rd abridge ed. Classification of Documents, having simple, compound and complex subjects.
2. Classification of documents requiring use of common and special auxiliaries.

Details of each part of paper is given below:

- Q. 1. 10 Titles out of 14 Titles are to be classified (Based on coordination, extension, relation, and order fixing). (10X4 = 40 Marks)
- Q. 2. 10 Titles out of 14 Titles to be classified (Titles with certain emphasis on the use of common auxiliaries- language, form, place, time, and ethnic group, and special auxiliaries) (10x6 = 60 Marks)

Note:

1. The practical examination in paper MLS-711 will also take place along with theory paper. The setting and evaluation of the paper will be done on the same pattern as that of theory paper.
2. Classification of Documents, Monographs and Articles by Universal Decimal Classification. 3rd abridge ed.

**Elective Paper- MLS-A01: Information Sources and Literature in
Natural Sciences (Theory)**

Max. Marks: 100

1. **Overview of major subjects of Natural Sciences:** Definition, Classification, Nature and Scope. Developments and trends
2. **Brief Survey of the Contributions made by the following Scientists:**
 - Sir Isaac Newton
 - Charles Darwin
 - Louis Pasteur
 - Gregor Johann Mendal
 - Madam Marie Curie
 - Albert Einstein
 - C.V. Raman
 - J.C. Bose
 - H.J. Bhabha
 - Hargobind Khurana

3. **E- Information Sources in Science & Technology:** Concept, Definition, Types, Advantages and Disadvantages
4. **Use of Different Types of Primary Documents in the Growth and Development of Science & Technology Disciplines:** Periodicals, Research Reports, Conference Papers, Patents and Standards
5. **Evaluation of the following Bibliographical Sources of Information in Print/ Electronic form:**
 - Biological Abstracts
 - Chemical Abstracts
 - Physics Abstracts
 - Indian Science Abstracts
 - Science Citation Index
 - Current Contents
 - Web of Science (WoS)
 - SCOPUS
6. **Role of major Indian scientific institutions in growth and development of Science and Technology:**
 - Council of Scientific and Industrial Research – CSIR
 - Indian Council of Agricultural Research – ICAR
 - Indian Council of Medical Research-ICMR
 - Defence Research and Development Organisation – DRDO
 - Indian National Science Academy – INSA
 - National Institute of Science Communication And Information Resources - NISCAIR

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OR

Elective Paper- MLS-A02: Information Sources and Literature in Social Sciences (Theory)

Max. Marks: 100

1. **Overview of major subjects of Social Sciences:** Definition, Classification, Nature and Scope, Developments and trends
2. **Brief Survey of the Contribution made by the following Social Scientists:**
 - Kautilaya
 - Adam Smith
 - Alfred Marshal
 - J. M. Keynes
 - Plato
 - Aristotle
 - M.K. Gandhi
 - Max Weber
 - Karl Marx
 - Thomas Robert Mathus
3. **E- Information Sources in Social Sciences:** Concept, Definition, Types, Advantages and Disadvantages.
4. **Use of Different Types of Primary Documents in the Growth and Development of Social Sciences Disciplines:** Periodicals, Research Reports, Conference Papers, Gray Literature.
5. **Evaluation of the following Bibliographical Sources of Information in Print/ Electronic form:**
 - Social Sciences Citation Index, New York
 - International Bibliography of Social and Cultural Anthropology, London
 - Economic Abstracts, The Hague
 - International Political Science Abstracts, London
 - Sociological Abstracts, New York
 - Library and Information Science Abstracts (LISA)
 - Web of Science (WoS)
 - Scopus
6. **Role of major Indian Social Sciences institutions in growth and development of Social Science:**
 - Indian Council of Social Science Research (ICSSR)
 - Tata Institute of Social Sciences (TISS)
 - Indian Institute of Public Administration (IIPA)
 - Institute of Rural Management (IRMA), Anand
 - Institute of Economic Growth (IEG), New Delhi
 - Indira Gandhi National Centre for the Arts (IGNCA)

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RECOMMENDEDBOOKS

Paper: MLS-701: Basics of Research and Statistical Methods (Theory)

1. KEMP (DA). The nature of knowledge: An introduction for librarians. 1976. Clive Bingley, London.
2. HAMLYNE (DW). The theory of knowledge. 1970. MacMillan, London.
3. AGARWAL (DS). Lectures on Universe of knowledge. 1985. Delhi Academic Publication, Delhi.
4. MCGARY (KJ). Communication knowledge and library. 1975. Clive Bingley, London.
5. DAMPIER (William Cecil). History of science and its relation with philosophy and religion. 1961. Cambridge University, London.
6. GUPTA (CB). An Introduction to statistical methods. 1979. Vikas Publishing House, Ghaziabad.
7. ADAMS (Gerald R) and SCHVANVELDT (Jay D). Understanding research methods. 1985. Longman, New York.
8. REDDY (T Subbi) and RAO (P Bappa). Research methodology and statistical measure. 1995. Reliance Publishing House, New Delhi.
9. BUSHA (Charles H) and HARTER (Stephen P). Research methods in librarianship: Techniques and interpretation. 1980. Academic Press, New York.
10. YOUNG (DV). Scientific social survey and research. 1982. Prentice Hall, New Delhi.
11. FRANKFORT (Chava) and NACHMIAS (David). Research methods in social sciences. Ed 4. 1992. St. Martin Press, New York.
12. KRISHAN KUMAR. Research methods in library and information science. Rev. ed. 1999. Har-Anand Publication, New Delhi.
13. GHOSH (BN). Scientific methods and social research. 1982. Sterling, New Delhi.
14. KERLINGER (Frederick N). Foundation of behavioural research. Ed. 2. 1973. Holt, Rinehart and Winston, New Delhi.
15. SARANTAKOS (Sotirios). Social research. 1993. Macmillan, London.
16. REID (LA). Ways of knowledge and experience. 1961. Allen and Unwin, London.
17. FLOWER (WS). Development of scientific methods. 1963. Pergamory, New York.
18. POWELL (Ronald R). Basic Research methods for librarians. 1985. Ablex, Norwood, N.J.
19. BLISS (HE). Organisation of knowledge and the system of science. 1949. Holt, New York.

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Paper: MLS-702: Information and Communication Technology (Theory)

1. HUNT (Reger) and JOHN (Shelly). Computer and Commonsense. 1982. Prentice Hall, Delhi.
2. REWLEY (JE). Computers for libraries. 1980. Clive Bingley, London.
3. TEDD (LA). Introduction to Computer-based library system. Ed 2. 1984. Hyden, London.
4. MAYNARD (J). Computer programming - made simple. 1983. ELBS, London.
5. FOSDICK (Howard). Computer basics for librarians and information scientists. 1985. Information Resources Press, Arlington.
6. LEVEY (Ian). Automating library procedure. 1984. Library Association, London.
7. KAUL (HK). Library network: An Indian experience. 1992. Virgo, New Delhi.
8. BROPHY (Peter). The library in the 21st century: New service for information age. 2001. Library Association, London.
9. CHOWDHURY (GG) and CHOWDHARY (Sudatta). Searching CD-ROM and online information sources. 2001. Library Association, London.
10. DICKSON (Garg W) and DESANCTIS (Gerardine). Information technology and the future enterprise: New models for managers. 2001. Prentice Hall, New Jersey.
11. JANCZEWSKI (Lech). Internet and intranet security management: Risks and solutions. 2000. Idea, Hershey.
12. RODRIGUEZ (MVR) and FIRRANTE (AJ). Information technology for the 21st Century: managing the change. 1996. MVR Rodviguez, Milano.
13. LESK (Michael). Practical digital libraries: Books, bytes and bucks. 1997. Morgan Kaufonon. San Francisco.
14. WINSHIP (Ian) and McNAB (Alison). The student's guide to the Internet. 1999. Library Association, London.
15. WISE (Richard). Multimedia: A critical introduction. 2000. Routledge, London.
16. SESHAGIRI (N) and AHAPOV (ARAM), Ed. Multimedia Computer and Communication. 1992. McGraw-Hill, New Delhi.
17. SUZANNE (Bahter), Ed. Information transfer, New Age, New ways. 1983. Kluwer Academic Publishers, London.
18. Getting Started Microsoft Windows 98. Ed 2. 1999. Microsoft Corporation, USA.
19. MINASI (Marks). Mastering in Windows NT server. 1999. BPB, New Delhi.
20. MINI-MICRO CDS/ISIS. Reference manual and CDS/ISIS PASCAL manual. 1989, UNESCO, Paris.

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**Paper: MLS-703 & MLS-711: Knowledge Organisation and Information
Processing (Theory & Practical)**

1. RANGNATHAN (SR). Philosophy of library classification. 1951. Sarada Ranganathan Endowment for Library Science, Bangalore.
2. RANGNATHAN (SR). Prolegomena to library classification. Ed. 3. 1937. Sarada Ranganathan Endowment for Library Science, Bangalore.
3. RANGNATHAN (SR). Classification and Communication. 1951. Sarada Ranganathan Endowment for Library Science, Bangalore.
4. RANGNATHAN (SR). Library classification, fundamentals and procedure. Sarada Ranganathan Endowment for Library Science, Bangalore.
5. BLISS (HE). Organisation of knowledge in libraries and systems of science. Henry Hold Land Co., New York.
6. Annals of Library Science/Annals of Library and Information Studies (Periodical). NISCAIR, New Delhi.
7. Schedules of UDC. FID, Brussels
8. International Study Conference on Classification. Proceedings. 1965. Munksgard, Copenhagen.
9. DE GROLIER (Eric). A Study of general categories. 1962, UNESCO, Paris.
10. RECHARDSON (EC). Classification: Theoretical and practical. Ed 2. 1972. New York.
11. SAYERS (WCB). Manual of classification for librarians. Rev. by Arthur Maltby. Ed 5. 1975. Andre Deutsch, London.
12. SAYERS (WCB). Introduction to library classification. Rev. by Arthur maltby. Ed 9. 1958. Grafton, London.
13. KRISHAN KUMAR. Theory of classification. 1993. Vikas Publishing House, New Delhi.
14. RANGNATHAN (SR). Colon classification. Ed 7. Sarada Ranganathan Endowment for Library Science, Bangalore.
15. RANGNATHAN (SR). Colon classification. Ed 6. Sarada Ranganathan Endowment for Library Science, Bangalore.
16. DEWEY (Melvil). Dewey decimal classification. Ed 19.
17. UDC International Medium edition (English Text). 1985.
18. International Study Conference on Classification Retrieval, (Dorking). Proceedings. 1957. Aslib, London.
19. American Library Association etc. Anglo-American Cataloguing Rules, North Amerian Text. 1978, ALA, Chicago.
20. RANGANATHAN (SR): Classified Catalogue Code with Additional Rules for Dictionary catalogue, code, Ed.5 1964. Asia, Bombay.
21. RANGANATHAN (SR): Heading and canons: Comparative study of five catalogue codes. 1965. Vishwanathan, Madras.

22. PETTEE (Julia): Subject Heading: The History and theory of the alphabetical subject approach to books. 1948. Wilson, New York.
23. DAYKIN (DJ): Subject Heading: A practical guide. 1951. Govt. Printing off, Washington.
24. SNYERS (WCB): First steps of annotation in catalogue. Rey. Ed. L.A., London.
25. COLISON (RL): Indexes Indexing. 1953. Bond, London.
26. Osborn (AD): Serial publications: their place and treatment in Libraries. 1955. ALA, Chicago.
27. COLLISON (KL): The treatment of special material in Libraries. 1958. Columbia University Press, New York.
28. COATES (EJ): Subject catalogue: Heading and Structure London, L.A, 1960.
29. International Conference on Cataloguing Principles, Paris 1961, Report, 1963. I F L A, London.
30. RANGANATHAN (SR). Documentation: its genesis and development. 1973. Vikas, Delhi.
31. RANGANATHAN (SR). Documentation and its facets. 1964. Asia, Bombay.
32. PENNA (CV). The Planning of library and Documentation Service. 1970, UNESCO, Paris.
33. MUKERJEE (AK). Fundamentals of special librarianship and documentation. 1965. IASLIC, Calcutta.
34. FRANK (O), Ed. Modern documentation and information practice. 1961. FID, Hague.
35. PERRY (JW), Documentation and information retrieval. 1959. Interscience Wiley, New York.
36. International Conference on Scientific Information. Proceedings 2V. 1958. Washington.
37. TAUBE (M) and others. Studies in co-ordinate indexing. 5V. 1953-59. DC Documentation Inc., Washington.
38. KENT (A). Text book on mechanized information retrieval. 1962. Interscience, New York.

**Paper: MLS-A01: Information Sources and Literature in Natural Sciences
(Theory)**

1. AMERICAN CHEMICAL SOCIETY. Searching the chemical literature. 1961. American Chemical Society, Washington.
2. AUGRE (Pierre). Current trends in scientific research. 1961, UNESCO, Paris.
3. BERNAL (JD). Social function of science. 1964. MIT Press, Cambridge.
4. BROWN (CH). Scientific serials. 1956. Association of College and Research Libraries, Chicago.
5. DUMPIER (WC). History of science and its relation with philosophy and religion. 1961. Cambridge University Press, London.
6. GROGAN (Dennis). Science and technology: Introduction to the literature. Ed 4. 1982. Clive Bingley, London.

7. HALL (A Rupert) and HALL (Marie Boas). Brief history of science. 1964. New American Library world Literature, New York.
8. JEANS (James). Growth of physical sciences. 1951. Fawcett world, New York.
9. JEAKINS (F). Science reference sources. Ed 4. 1965. Union Bookstore, Illinois.
10. PRICE (Derek J De Solla). Little science, big science. 1963. Columbia University Press, New York.
11. KASER (David) and others. Library development in either Asian Countries. 1969. Scarecrow Press, N.J.
12. DEEL (Bruee). Librarianship in Canada, 1946-1967. 1968 Canadian Library Association, Ottawa.
13. MALLAKER (KA) and others, Ed. The international standardization of library statistics L. A. progress report. 1968. IFTA, Bombay.
14. RANGANATHAN (SR) and others, Ed. Free bone service: An international. 1968. Asia, Bombay.
15. SHAFER (Date Engenem). The maturity of librarianship as a profession. 1968. Asia, Bombay.
16. MOSER (Diane K) AND SPANGENBUR (G). The history of science. 1994. University Press, New Delhi.
17. SPANGENBURG (Ray) and MOSER (Diane K). The History of science in the 19th Century. 1994. University Press, Hyderabad.
18. CARNOVSKY (L). International aspects of librarianship: Paper presented before Eighteenth Annual Conference on Graduate School of the University of Chicago. 1954. University of Chicago, University Press, Chicago.
19. CHIFT (DH), Ed. Library Association in the United States British Commonwealth. Library Trends; 3 (January); 1955 (Whole issue).
20. STANDFOLD (FB). Increasing library resources through co-operation. Library Trends; 6 (3), 1968. P. 206-303.
21. GRAZIER (RT). Cooperation among libraries of different types. Library Trends; 6 (3); 1958. p 233-342.
22. WHITE (CM), Ed. Bases of modern librarianship. 1964. Pergamon, New York.
23. www.csir.res.in
24. <https://icar.org.in>
25. <https://icmr.nic.in>
26. <https://www.drdo.gov.in>
27. www.insaindia.res.in
28. <http://www.niscair.res.in>

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OR

**Paper: MLS-A02: Information Sources and Literature in Social Sciences
(Theory)**

1. CASE (D). Looking for Information, Second Edition: A Survey of Research on Information Seeking, Needs, and Behavior. 2006. Emerald Publishing, UK.
2. DEUTCHER (LG) and others. Guide to historical literature 1951. Macmillan, New York.
3. DWIVEDI (Y K) and WADE (M R) Information Systems Theory: Explaining and Predicting. 2011.
4. HEVNER (Alan) and CHATTERJEE (Samir) Design Research in Information Systems: Theory and Practice. 2010. Springer, New York.
5. HOSELITZ (Bert F). Reader's guide to the social sciences. Rev. ed. 1972. Free Press, Glencoe.
6. IRANI (Z) and LOVER (Peter) Evaluating Information Systems: Public and Private Sector. 2008. Butterworth-Heinemann, UK.
7. LECKIE (G J) et al. Critical Theory for Library and Information Science: Exploring the Social from Across the Disciplines. 2010. Libraries Unlimited, Colorado.
8. MACKENZIE (N), Ed. Guide to the social sciences. 1966. Weidenfeld, London.
9. MACKENZIE (WJM). Study of political science today. 1970. Macmillan, London.
10. MADAN (G R). Economic thinking in India. Ed 2. 1981. S. Chand, Delhi.
11. MAJUMDAR (R C). Historiography in modern India. 1970. Asia. Bombay.
12. MANN (Peter H). Methods of sociological enquiry. 1968. Schocken Book, New York.
13. RAJARAMAN (V) Analysis and design of Information Systems. 2011. PHI, New Delhi.
14. REX (John). Discovering sociology: Studies in sociological theory and method. 1973. Rutledge and Kegan Pal, London.
15. SELIGMAN (Ben B). Main Currents in modern economic. 1962. Fress Press, New York.
16. UNESCO. Main trends of research in social and human sciences. 1970. UNESCO, Paris.
17. UNNITHAN (TKN), Ed. Sociology of India. 1967. Prentice Hall, New Delhi.
18. WHITE (C M) and others. Sources of Information in the social sciences. Ed. 2. 1973. Bedminister Press, Tolowa, N.J.
19. <http://icssr.org/>
20. www.tiss.edu
21. www.iipa.org.in
22. <https://www.irma.ac.in>
23. tedu.iift.ac.in/iift
24. ignca.gov.in/en

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SYLLABUS

SECOND SEMESTER

MASTER OF LIBRARY AND INFORMATION SCIENCE

2023—2024

S. No.	Subject Code	Course Title	Course Category	Credit	Max. Marks	
					CA	EoSE
1.	MLS- 801	Knowledge Management and Scholarly Communication (Theory)	CCC	6	100	100
2.	MLS- 802	ICT Application in Library & Information Science. (Theory)	CCC	6	100	100
3.	MLS- 811	ICT Application in Library & Information Science (Practical)	CCC	6	100	100
4.	MLS- 812	Knowledge Organisation and Information Processing: Anglo American Cataloguing Rules- 2 (AACR-2) (Practical)	CCC	8	100	100
5.	Elective- B01	Management of Academic Library (Theory)	ECC	6	100	100
	Elective- B02	Management of Special Library (Theory)				

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SEMESTER-II

Paper: MLS-801: Knowledge Management and Scholarly Communication (Theory)

Max. Marks: 100

1. **Knowledge Management:** Concept, Definition, Need, Function and Benefits. Difference between Information Management (IM) and KM. Knowledge Society: Concept features of KS. Role of libraries in KS.
2. **KM Operation Process:** Identification of need for Knowledge, Knowledge pull, Knowledge push, Creation of Knowledge, Knowledge collection and storage, Knowledge update.
3. **KM Tools and Techniques:** Requirements of KM tools, ICT tools in/for KM, KM technologies. KM Issues and Challenges: General KM issues –Nature of Knowledge, People (users) and organization.
4. **Basics of Scholarly communication:** Concept of Peer review process. Migration of peer-reviewed journals from print to Web-based. Digital publishing -- different models. Protecting copyright vs. Creative Commons. Open Access Publishing. Archival options for short and long term preservation.
5. Concept and foundation of Informetrics, Scientometrics, Bibliometrics and Webometrics.
6. **Foundation of Research Evaluation:** Quality, Impact, and Utility. Journal level metrics: Journal Impact Factor, CiteScore. Author level metrics: h-index, g-index, i-10 index and m-quotient index. Ranking of Institutions. Introduction to National Institutional Ranking Framework (NIRF).

Paper: MLS-802: ICT Application in Library and Information Science (T)

Max. Marks: 100

1. **Database:** Introduction, Characteristics, Types of Databases, Structural: Hierarchical, Relational, and Network Database; Content: Bibliographical, Full Text, Numeric, and Non-numeric with examples
2. **Digital Libraries:** Concept, Objectives, Advantages and Disadvantages. Conventional Vs Digital Libraries. Indian initiatives of Digital Libraries. Challenges and Issues of Digital Libraries. Open Educational Resources (OER): Concept, Need, and Initiatives.
3. **Components of Digital Libraries:** Hardware and Software Components

4. **Digital Library Protocols & Standards:** TCP/IP, HTTP, FTP; MARC, MARC XML, Dublin Core, METS, and MODS. Interoperability Standards: OAI-PMH, OAI-ORE. Metadata: Concept, Need and Types
5. **Library Management Software:** Concept, Need and Features - SOUL, GSDL, D-Space, KOHA. Content Management Software (CMS): Drupal and Joomla.
6. **Application of ICT in Library Housekeeping Operations:** Acquisition, Technical Processing, Circulation, Serial Control, Web OPAC and LIS Services.

**Paper: MLS-811: ICT Application in Library and Information Science
(Practical)**

Max. Marks: 100

1. **System Software:** Microsoft Windows, Open Office: Text document; Spreadsheet; Presentation
2. **Creation and Design of Digital Library using GSDL / DSpace Software**
3. **Practice using Integrated Library Management Software:** SOUL / Koha Software.
4. **Web Page Designing using HTML:** Features i.e., background text, colour, and images; Moving image, etc. Creation of List – Ordered and Unordered, Table, Forms and Frames, Creation of hyperlinked web pages, Internet and Database Searching.

**Paper: MLS-812: Knowledge Organisation and Information Processing:
Anglo American Cataloguing Rules-2 (AACR-2) (Practical)**

Max. Marks: 100

1. Cataloguing of documents by **Anglo American Cataloguing Rules-2 (AACR-2)**, 2nd ed.
2. Books to be catalogued are of :
 - (A) Personal authorship
 - (B) Corporate (Govt., Institution and Conference) authorship,
 - (C) Multivolume books,
 - (D) Composite books and
 - (E) Periodicals.

Details of paper is given below:

05 titles to be catalogued out of 07 titles

(20X5=100 Marks)

Note:

1. The practical examination in paper MLS-812 will also take place along with theory paper. The setting and evaluation of the paper will be done on the same pattern as that of theory paper.
2. Sears/ LC List of Subject Headings is allowed for practical purpose.

Elective Paper: MLS-B01: Management of Academic Library (Theory)

Max. Marks: 100

1. Role of UGC, Study of the recommendations of various committees with regard to academic libraries in India.
2. Human Resources Management in Academic Libraries: Staffing Pattern-Staff Formula of Ranganathan and UGC Qualifications and pay scales, Staff requirements and selection. Performance Appraisal, Training and Development, PERT (Program, Evaluation and Review Technique), CPM (Critical Path Method)
3. Total Quality Management (TQM). Elements of TQM. Implementing TQM Techniques in Library and Information Centres, Barriers to Implementing TQM.
4. Collection Development and Management of Books, Serials & Non-book Materials, Collection Development Policy. Collection care & evaluation. Problems of Collection development in India.
5. Marketing Management in Academic Libraries: Basic components of Marketing Strategy- Marketing approach, Market segmentation, Market research (analysis), Marketing mix, Implementing marketing programme and their evaluation, Marketing of Information.
6. Disaster Management in Libraries & Information Centres.

Elective Paper: MLS-B02: Management of Special Library (Theory)

Max. Marks: 100

1. Role of Special Libraries, Types and Functions of Special Libraries, Growth and Development of Special Libraries in UK, USA and India in the Twentieth Century, Role of CSIR in the Development of Special Libraries of India.
2. Human Resources Management in Special Libraries: Staffing Pattern-Staff Formula of Ranganathan and UGC Qualifications and pay scales, Staff requirements and selection. Performance Appraisal, Training and Development, PERT (Program, Evaluation and Review Technique), CPM (Critical Path Method)
3. Total Quality Management (TQM). Elements of TQM. Implementing TQM Techniques in Library and Information Centres, Barriers to Implementing TQM.

4. Collection Development and Management of Books, Serials & Non-book Materials, Collection Development Policy. Collection care & evaluation. Problems of Collection development in India.
5. Marketing Management in Special Libraries: Basic components of Marketing Strategy- Marketing approach, Market segmentation, Market research (analysis), Marketing mix, Implementing marketing programme and their evaluation, Marketing of Information.
6. Disaster Management in Libraries & Information Centres.

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RECOMMENDED BOOKS

Paper: MLS-801: Knowledge Management and Scholarly Communication (Theory)

1. AL-HOWAMDEH (Suleman). Knowledge Management Cultivating: Knowledge Architecture. How to Implement Successful Knowledge Management Programs. 2003.Sage Publishers, New Delhi.
2. BECARRA (F). Knowledge Management Systems and Processes. 2010.PHI, New Delhi.
3. BENBYA (Hind). Knowledge management Systems Implementation.2008.Chandos, UK.
4. MAIER (R). Knowledge Management Systems. 2004. Springer, USA.
5. MILTON(N). 2005. Knowledge Management for Teams and Projects. Oxford: Chandos.
6. RAMAN (AT). Knowledge Management. 2004. Excel Books, New Delhi.
7. SHUKLA (Archana) and SRINIVASAN (R). Designing Knowledge Management. 2002.Response,New Delhi.
8. STEVE (Ellis). Knowledge-based workers: Intelligent Operating for the Knowledge Age. 2005.Chandos, Oxford.
9. SURESH (K L) and MAHES (Kavi). Ten Steps to Maturity in Knowledge Management: Lessons in Economy. 2006.Chandos, Oxford.
10. TIWANA (Amrit). The Knowledge Management Tool kit. 2000. Pearson, New Delhi.
11. LIEBOWITZ(Jay). Building Organizational Intelligence: A Knowledge Management Primer. 1999. CRC Press, Washington, D.C.
12. SPIEGLER(Israel). Knowledge Management: A New Idea or a Recycled Concept? Communications of the Association for Information Systems, Vol. 3, 2000.
13. DESOUZA (KC) and PAQUETTE (S.) (Eds.). Knowledge management: An Introduction. 2011. Neal-Schuman Publishers, Inc., New York.
14. HUCZYNSKI (A) and BUCHANAN(D.). Organisational behaviour: An introductory text. 2001. Financial Times/Prentice Hall, Harlow.
15. JASHAPARA (A). Knowledge management and culture, knowledge management: An integrated approach. 2003. Prentice-Hall, London.
17. HISLOP (D). Knowledge management in organisations: A critical introduction. 3rd Ed. 2013. Oxford University Press, UK.

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**Paper: MLS-802 & 811: ICT Application in Library & Information
Science (Theory & Practical)**

1. ADLER (S) and others. Extensible Stylesheet Language (XSL) Version 1.0, (W3C Recommendation accessed at <http://www.w3.org/TR/xsl>).
2. BENZ (B.) and DURANT (JR). XML 1.1 Programming Bible (Covers J2EE, Java, Databases, Web Services and .NET). 2003. Wiley Publishing, New Delhi
3. BLOOD (R). The Weblog Handbook: Practical Advice on Creating and Maintaining Your Blog. 2002. Perseus Publishing, Cambridge.
4. BRAY (T.), HOLLANDER(D), and LAYMAN (A). Namespaces in XML. (Accessed at <http://www.w3.org/REC-xml-names/>)
5. BRAY (T). Extensible Markup Language (XML) 1.0, 2nd ed. W3C Recommendation, <http://www.w3.org/TR/REC-xml>
6. DARNELL(R) and others. HTML 4 Unleashed: The Comprehensive Solution. 1999. Techmedia, New Delhi.
7. GOODMAN (D). Dynamic HTML: Definitive Reference. 1998. O'Reilly, Cambridge.
8. HJELM (J). and STARK(P). XSLT: The Ultimate Guide to Transforming Web Data. 2002. John Wiley, New York.
9. MERCER (D). XML: A Beginner's Guide. 2001. McGraw Hill (Osborne), New York.
10. WILLINSKY (John). Access Principle: Case for Open Access to Research and Scholarship. 2006. MIT Press, Cambridge.
11. LEVEY (Ian). Automating library procedure. 1984. Library Association, London.
12. KAUL (HK). Library network: An Indian experience. 1992. Virgo, New Delhi.
13. BROPHY (Peter). The library in the 21st century: New service for information age. 2001. Library Association, London.
14. JANCZEWSKI (Lech). Internet and intranet security management: Risks and solutions. 2000. Idea, Hershey.
15. WINSHIP (Ian) and McNAB (Alison). The student's guide to the Internet. 1999. Library Association, London.
16. WISE (Richard). Multimedia: A critical introduction. 2000. Routledge, London.
17. MINI-MICRO CDS/ISIS. Reference manual and CDS/ISIS PASCAL manual. 1989, UNESCO, Paris.
18. ANDREWS (J). Digital Libraries. 2010. Ashgate, London.
19. CORNISH(GP). Copyright interpreting the law for libraries and archives. 1990. Library Association, London.
20. COSTANTINO (T) and MARISTELLA (A). Research and Advanced Technology for Digital Libraries: 6th European Conference, ECDL 2002, Rome. 2002. Springer, New York.
21. DAHL (Mark) et al. Digital Libraries: Integrating content and systems. 2006. Chandos, London.
22. COULHON (K). Exploring digital libraries: foundations, practice, prospects. 2014. Facet Publishing, London.

23. CHOUDHARY (GG) and CHOUDHARY(S). Introduction to digital libraries. 2003. Facet Publishing, London.
24. FENNER (A) (ed.). Managing Digital Resources in Libraries. 2005. Haworth, New York.
25. FOSTER (I) and KESSELMAN(C). The Grid 2: Blueprint for a New Computing Infrastructure (The Morgan Kaufmann Series in Computer Architecture and Design). 2nd ed. 2004. Morgan Kaufmann, San Francisco.
26. GOPAL (K). Digital Libraries in Electronic Information Era. 2000. Authors Press, New Delhi.
27. LESK (M). 1996. Understanding Digital Libraries, (The Morgan Kaufmann Series in Multimedia and Information Systems). 2nd ed. Morgan Kaufman, San Francisco.
28. PITKIN (GM).(ed.). National Electronic Library: A Guide to the Future for Library managers. 1996. Greenwood Press, London.
29. WILLIAM (A). Digital Libraries. 2005. Anne, New Delhi.

**Paper: MLS-812: Knowledge Organisation and Information Processing:
Anglo American Cataloguing Rules-2 (AACR-2) (Practical)**

1. Anglo-American Cataloguing Rules (2nd rev. ed.). 1988. Chicago: ALA and Library Association.
2. CUTTER, Charles A. 1949. Rules for a Dictionary Catalogue. London: Library Grafton & Co.
3. FRITZ, D. A. 2009. Cataloging with AACR2: Anglo American cataloging rules and MARC21 for books, electronic resources, sound recordings, video recordings, and serials. (2nd ed.). New Delhi: Pentagon Press.
4. GIRJA KUMAR, & KRISHAN KUMAR. 1988. Theory of cataloguing (5th ed.). New Delhi: Vikas.
5. HUNTER, Eric J. 1989. Examples illustrating AACR-2 (1988) revision. London: LA.
6. IFLA, ISBD Review Group. 2010. ISBD (International Standard Bibliographic Description).
7. IFLA, Study Group on the Functional Requirements for Bibliographic Records. 2010. Functional Requirements for Bibliographic Records.
8. KRISHAN KUMAR. 1990. An introduction to AACR-2. New Delhi: Vikas.
9. MAXWELL, Margaret F. 1989. Handbook for AACR-2 (1988) revision. Chicago: ALA.
10. MAXWELL, R. L. 2014. Maxwell's handbook for RDA: explaining and illustrating RDA using MARC21. London: Facet Publishing
11. MILLER (J). Sear's List of Subject Headings (17th ed.). 2000. Wilson, New York.
12. MERRING (M). The RDA workbook: learning the basics of Resource Description and Access. 2014. Englewood, Co.
13. OLSON (HA) and BOLL (JJ). Subject analysis in online catalogs. (2nd ed.). 2001. Englewood, Co.

14. RANGANATHAN (SR). Classified Catalogue Code with additional rules for Dictionary catalogue code (5th ed.). 1964. Asia, Bombay.
15. RANGANATHAN (SR). Cataloguing practice (2nd ed.). 1974. Asia, Bombay.
16. TAYLOR (AJ). and MILLER (DP). Introduction to cataloging and classification. (10th ed). 2007. Atlantic Publishers, New Delhi.
17. WYNAR (BS) and MILLER (DP). Wynar's introduction to cataloging and classification (9th ed.). 2000. Englewood, Co.

Paper: MLS-B01: Management of Academic Library (Theory)

1. BROPHY (Peter). The academic library 2000. Library Association, London.
2. LINE (Maurice B), Ed. Academic library management. 1990. Library Association, London.
3. JORDON (Peter). The academic library and its users. 1998. Grower, London.
4. CHAPMAN (Liz). Managing acquisition in library and information service. 2001. Library Association, London.
5. METCALF (KD). Planning academic and research library building. 1965. McGraw-Hill, New York.
6. LYLE (GR). Administration of the college library. Ed 4. 1974. Wilson, New York.
7. RANGANATHAN (SR). School and college libraries. 1942. Madras Library Association, Madras.
8. WEBB (Sylvia P). Personnel development in information work. Ed. 2 1991. Aslib, London.
9. WILSON (LR) and TAUBER (MF). University Library. Ed 2. 1956. Columbia University Press, New York.
10. BRAMHAM (J). Human resources planning. 1990. Institute of Personnel Management, London.
11. BENNISON (M) and CASSON (J). The manpower planning handbook. 1984. McGraw-Hill, New York.
12. STOREY (J). Development in the management of human resources. 1992. Blackwell publishers, Oxford.
13. BAKER (David), Ed. Resource Management in academic libraries. 1997. Library Association, London.
14. GELFAND (MA). Universities libraries for developing countries. 1968, UNESCO, Paris.
15. EVANS (GE). Management techniques for librarians. Ed 2. 1983. Academic Press, San Diego.
16. RIZZO (JR). Management for librarians: Fundamentals and issues. 1980. Greenwood Press, West Port.
17. STUEART (RD) and EASTLICK (JT). Library management. Ed 2. Libraries Unlimited, Englewood.

18. NARAYANA (GJ). Library and information management. 1991. Prentice-Hall, New Delhi.
19. CHAPMAN (Edward A) and others. Library systems analysis guidelines. 1970. Wiley Interscience, New York.
20. DOUGHERTY (RM) and HEINRITZ (FJ). Scientific management of library operations. Ed 2. 1983. Scarecrow, Washington.
21. LANCASTER (FW). The measurement and evaluation of library services. Information Resources Press, Washington.
22. COOTE (Helen) and BATCHELOR (Bridge). How to market your library service effectively. Ed 2. Aslib, London.
23. JAIN (Abhinandan K) and others. Marketing information products and services: A primer for libraries and information professionals. 1999. Tata McGraw-Hill, New Delhi.
24. THOMPSON (Jones). Introduction to University library administration. 1970. Clive Bingley, London.
25. KOTLER (Philip) and ARMSTRONG (Gray). Principle of marketing. Ed. 7. 1996. Prentice Hall of India, New Delhi.
26. COOTE (Helen) and BATCHELOR (Bridget). How to market your library service. Ed. 2. 1997. Aslib, London.

Paper: MLS-B02: Management of Special Library (Theory)

1. STRAUSS (LJ) and others. Scientific and technical libraries. Ed 2 1972. Becket and Hayes, New York.
2. SCAMMELL (Alison W), Ed. Handbook of special librarianship and information work. Rev. ed. 7. 1997. Aslib, London.
3. CLAPP (VW). Feature of the research library. 1964. University of Illinois, Urbana, Champain.
4. GROGAN (N). Science and technology : An introduction to the literature. Ed 4. 1982. Clive Bingley, London.
5. CHAPMAN (Liz.) Managing acquisition in library and information services. 2001. Library Association, London.
6. GRENIELL (D). Periodicals and serials : The treatment in special libraries. Ed 2. 1965. Aslib, London.
7. RANGANATHAN (SR). Documentation and its facets. 1963.
8. SAHA (J). Special libraries and information services in India and the USA. 1969. Scarecrow, New York.
9. LEWIS (CM), Ed. Special libraries. 1963. Special Libraries Association, USA.
10. HOUGHTON (Bernard). Technical information sources. Ed 2. 1972. Clive Bingley, London.
11. BURKETT (J) and MORGAN (TS), Ed. Special materials in the library. 1963. Aslib, London.

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12. BATTEN (NE), Ed. Handbook of special librarianship and information work. Ed 4. 1976. Aslib, London.
13. CARTER (LF) and others, Ed. National information handling system for science and technology. 1967. Wiley, New York.
14. PRANK (O), Ed. Modern documentation and information practice. 1961. FID, Hague.
15. EVANS (GE). Management techniques for librarians. Ed 2. 1983. Academic Press, San Diego.
16. RIZZO (JR). Management for librarians : Fundamentals and issues. 1980. Greenwood Press, West Port.
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19. CHAPMAN (Edward A) and others. Library systems analysis guidelines. 1970. Wiley Interscience, New York.
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24. THOMPSON (Jones). Introduction to University library administration. 1970. Clive Bingley, London.
25. KOTLER (Philip) and ARMSTRONG (Gray). Principle of marketing. Ed. 7. 1996. Prentice Hall of India, New Delhi.
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