UNIVERSITY OF RAJASTHAN
JAIPUR
SYLLABUS

Master of Library & Information Science
(Semester Scheme)
I & II Semester 2020-21
SYLLABUS
MASTER OF LIBRARY AND INFORMATION SCIENCE
2020-2021

OBJECTIVES:

The objectives of the MLISc (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 recognised by the Syndicate for the purpose or a post-
graduate Diploma in Library Science of a recognised 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

A candidate for the examination shall be required to offer the papers mentioned below. The maximum marks shall be noted against each paper. Each theory paper and practical paper shall be of 3 hours duration.

First Semester

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject Code</th>
<th>Course Title</th>
<th>Course Category</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>MLS 701</td>
<td>Basics of Research and Statistical Methods (T)</td>
<td>CCC</td>
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<tr>
<td>2.</td>
<td>MLS 702</td>
<td>Information and Communication Technology (T)</td>
<td>CCC</td>
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<td>3.</td>
<td>MLS 703</td>
<td>Knowledge Organisation and Information Processing (T)</td>
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<td>4.</td>
<td>MLS 711</td>
<td>Knowledge Organization and Information Processing: UDC (P)</td>
<td>CCC</td>
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<tr>
<td>5.</td>
<td>Elective-A01</td>
<td>Information Sources and Literature in Natural Sciences (T) OR Information Sources and Literature in Social Sciences (T)</td>
<td>ECC</td>
<td>6</td>
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<tr>
<td></td>
<td>Elective-A02</td>
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SYLLABUS
First Semester
MASTER OF LIBRARY AND INFORMATION SCIENCE
2020-2021

Paper: MLS-701: Basics of Research and Statistical Methods

Max. Marks: 100

1. Concept of Knowledge, Types of Knowledge, Attributes of Knowledge (Subject), Modes of Formation of Subjects


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


7. Statistical Techniques: Measures of central tendency: Mean, Mode and Median.

8. Presentation of Data: Purpose and Importance, Tabulation, Diagrammatic and Graphic, Report writing

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

Max. Marks: 100


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


5. **Modern techniques in ICT**: Concept of artificial intelligence, RFID, Barcode, Cloud Computing, Internet of Things (IoT).

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

Max. Marks: 100

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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 Filialatory sequence (2). Verbal Plane (4). Notational Plane (24) -- Basic Canons for notation (12): Canons for mnemonics (5); Canons for growing universe (4).


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.


6. **Current Trends in classification and Cataloging**: concept of Semantic
Web, FRBR and RDA.

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

**Max. Marks: 100**


2. Classification of documents requiring use of common and special auxiliaries.

Details of each part of paper is given below:

3. Q.110 Titles out of 14 Titles are to be classified (Based on coordination, extension, relation, and order fixing). 40=(10x4)

4. Q.210 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) 60=(10x6)

**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 (T)**

**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

**OR**

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

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)
RECOMMENDED BOOKS

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


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

7. Schedules of UDC. FID, Brussels
22. PETTEE (Julia): Subject Heading: The History and theory of the alphabetical subject approach to books. 1948. Wilson, New York
34. FRANK (O), Ed. Modern documentation and information practice. 1961. FID, Hague.
37. TAUBÉ (M) and others. Studies in co-ordinate indexing. 5V. 1953-59. DC Documentation Inc., Washington.

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

11. KASER (David) and others. Library development in either Asian Countries. 1969. Scarecrow Press, N.J.
13. MALLAKER (KA) and others, Ed. The international standardization of library statistics L. A. progress report. 1968. IFTA, Bombay.
15. SHAFER (Date Engenem). The maturity of librarianship as a profession. 1968. Asia, Bombay.
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
OR

Paper: MLS-AO2: Information Sources and Literature in Social Sciences

3. DWIVEDI (Y K) and WADE (M R) Information Systems Theory: Explaining and Predicting. 2011.
13. RAHMAN (A) and others, Ed. Indian reference material: Scientific and technical information users' needs and services. In IASLIC Publication. 1972. (Ninth IASLIC Conference).
20. WHITE (C M) and others. Sources of Information in the social sciences. Ed. 2.
22. www.tiss.edu
23. www.iipa.org.in
24. https://www.irma.ac.in
25. tedu.iift.ac.in/iift
26. ignca.gov.in/en
# SYLLABUS
## SECOND SEMESTER
### MASTER OF LIBRARY AND INFORMATION SCIENCE
#### 2020-21

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject Code</th>
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<tbody>
<tr>
<td>1.</td>
<td>MLS- 801</td>
<td>Knowledge Management and Scholarly Communication (T)</td>
<td>CCC</td>
<td>6</td>
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<tr>
<td>2.</td>
<td>MLS- 802</td>
<td>ICT Applications in Library &amp; Information Science. (T)</td>
<td>CCC</td>
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<tr>
<td>3.</td>
<td>MLS- 811</td>
<td>ICT Applications in Library &amp; Information Science. (P)</td>
<td>CCC</td>
<td>8</td>
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<tr>
<td>4.</td>
<td>MLS- 812</td>
<td>Knowledge Organisation and Information Processing: Anglo American Cataloguing Rules- 2 (AACR-2) (P)</td>
<td>CCC</td>
<td>8</td>
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<tr>
<td>5.</td>
<td>Elective-B01 Elective-B02</td>
<td>Management of Academic Library(T) OR Management of Special Library(T)</td>
<td>ECC</td>
<td>6</td>
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</table>

## SEMESTER-II

**Paper: MLS-801: Knowledge Management and Scholarly Communication (T)**  
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.

4. **KM Operation Process:** Identification of need for Knowledge, Knowledge pull, knowledge push, Creation of knowledge, Knowledge collection and storage, Knowledge update.

5. **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.

_Dy. Registrar (Academic-I)  
University of Rajasthan  
Jaipur_

5. Concept and foundation of Informetrics, Scientometrics, Bibliometrics and Webometrics.


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**Paper: MLS-802: ICT Applications 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


3. **Components of Digital Libraries:** Hardware and Software Components; Metadata: Concept, Types.

4. **Digital Library Protocols & Standards:** TCP/IP, HTTP, FTP; MARC, MARC XML, Dublin Core, METS, and MODS.

5. **Digital Library Resources:** Introduction, Advantages; Categories of E-Resources: E-Books, E-Journals, Online Databases, Websites; Online Vs Offline Resource; OER: Concept and Initiatives

6. **Library Management Software:** SOUL, GSDL, D-Space, KOHA. Content Management Software (CMS): Drupal and Joomla.

7. **Application of ICT in Library Housekeeping Operations:** Acquisition, Technical Processing, Circulation, and LIS Services.
Paper: MLS-811: ICT Application in Library and Information Science (P)
Max. Marks: 100

1. **System Software**: MS Windows, Open Office: Text document; Spreadsheet; Presentation

2. **Bibliographical Database**: WINISIS (CDS/ISIS for Windows) – Systems Overview, Database Design: FDT preparation; Worksheet design; Display Format language and Format design; Indexing techniques in WINISIS; FST preparation; Data Entry; Search Techniques: Dictionary search, Truncated search, Proximity search, Boolean search, Any search; Search formulation; Sorting & Printing Services; Master File Services; Data Import & Export, ISO 2709.

3. **Practice using integrated library management package**: SOUL Software/Koha.

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.

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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

Total Marks= 100 (20x5)

Raj/Tar

Dy. Registrar (Acad.)
University of Rajasthan
Jaipur
Note:
1. The practical examination in paper MLS-H01 will also take place along with the 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 Libraries (T)
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:** 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.


5. **System Analysis and Design:** Concept and library system, MIS (Management Information System), Time and Motion Study, SWOT (Strength, Weakness, Opportunities, and Threats).

6. **Marketing management:** Basic components of Marketing Strategy-Marketing approach, Market segmentation, Market research (analysis), Marketing mix, Implementing marketing programme and their evaluation, Marketing of Information.

7. Disaster Management in Libraries & Information Centres.
Elective Paper: MLS-B02: Management of Special Libraries (T)
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.


3. Total Quality Management (TQM), Elements of TQM, Implementing TQM Techniques in Library and Information Centres, Barriers to implementing TQM.


5. System Analysis and Design: Concept and library system, MIS, Time and Motion Study, SWOT (Strength, Weakness, Opportunities, and Threats).


7. Disaster Management in Libraries & Information Centres.
RECOMMENDED BOOKS

Paper: MLS-801: Knowledge Management and Scholarly Communication

1. NAZIM (Mohammad) and MUKHERJEE (Bhaskar). Knowledge Management in Libraries: Concepts, Tools and Approaches. 2016. Chandos Publishing, Massachusetts, USA.
10. RAVICHANDRA RAO (IK) and NEELAMEGHAN (A). Scientometrics. 2014. Ess Ess, India.

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).
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.

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Jaipur


17. WYNAR (BS) and MILLER (DP). Wynar’s introduction to cataloging and classification (9th ed.). 2000. Englewood, Co.

Paper: MLS-B01: Management of Academic Libraries

22. COOTE (Helen) and BATCHelor (Bridge). How to market your library service effectively. Ed 2. Aslib, London.

**Paper: MLS-B02: Management of Special Libraries**

22. COOTE (Helen) and BATCHelor (Bridge). How to market your library service effectively. Ed 2. Aslib, London.