SCHEME OF EXAMINATION & SYLLABUS of Master of Library & Information Science (M.Lib.) for Semester System Examination Session 2017-18

(Approved by Board of Studies) Effective from July 2017
# Master of Library and Information Science

## Scheme of Exam: 2017 – 18

### FIRST SEMESTER

<table>
<thead>
<tr>
<th>Paper</th>
<th>Subject</th>
<th>Internal Marks</th>
<th>External Marks</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLI</td>
<td>FOUNDATION OF INFORMATION SCIENCE</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>MLII</td>
<td>KNOWLEDGE ORGANISATION &amp; INFORMATION PROCESSING</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>MLIII</td>
<td>RESEARCH METHODS &amp; STATISTICAL TECHNIQUES</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>MLIV</td>
<td>MANAGEMENT OF LIBRARY &amp; INFORMATION CENTRES/INSTITUTION</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>MLV</td>
<td>INFORMATION PROCESSING AND RETRIEVAL (PRACTICE-I)</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
<td><strong>400</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

### SECOND SEMESTER

<table>
<thead>
<tr>
<th>Paper</th>
<th>Subject</th>
<th>Internal Marks</th>
<th>External Marks</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ML VI</td>
<td>INFORMATION RETRIEVAL</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>ML VII</td>
<td>INFORMATION SOURCES, PRODUCTS AND SERVICES</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>ML VIII</td>
<td>INFORMATION TECHNOLOGY : BASICS &amp; APPLICATIONS</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>ML IX_A</td>
<td>MANAGEMENT INFORMATION SYSTEMS.</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>ML X</td>
<td>INFORMATION PROCESSING &amp; RETRIEVAL (PRACTICE – II)</td>
<td>20</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
<td><strong>400</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Total Marks of Semester I & II**

- 200
- 800
- 40
UNIT-1 Information Science-
- Definition, Scope, Objectives, Genesis and development.
- Information Science as a discipline and its relationship with other subject fields.
- Information industry- Generators, Providers and intermediaries.

UNIT-2 Information and communication-
- Conceptual difference between data,
- Information and Knowledge.
- Communication of Information.
- Information generation and diffusion.
- Communication channels and barriers.

UNIT-3 Information and the state-
- Policies relating to information including science and technology and education.
- International and national programs and policies (NAPLIC)
- IT and library.
- UAP, UBC

UNIT-4 Information user & their needs-
- Categories of information users.
- Information needs: definition and models.
- Information seeking behavior.
- Methods and techniques of user studies.
- Evaluation of user studies.

Unit-5 Information products-
- Information products: Nature, concept, types, design and development and marketing.
- Economics of information.
- Information management.
- Knowledge management.
UNIT-1 Universe of Knowledge-
- Structure and attributes.
- Modes of formation of subjects,
- Different types of subjects and their modes of formation
- Universe of Knowledge as mapped in different schemes of classification.

UNIT-2 Methods of knowledge organization-
- Canons and normative principles of sayers and Ranganathan of classification.
- Species of Library Classification schemes.
- Standard schemes of library classification; Introduction, features and application-CC, DDC, & UDC.

UNIT-3
- Universal and special schemes of classification.
- Abstract classification.
- Choice of schemes of classification.
- Study of categories postulated by different classificationists for grouping ideas.
- Postulates & Principles for facet sequence,
- Telescoping of facets.

UNIT-4 Notation-
- Notation: Types, Structure & qualities, canons of notation.
- Mnemonics- Types and canons
- Indicator digits.
- Zone analysis and sector notation.
- Systems of book number.

UNIT-5 Recent Trends & Developments-
- Design and development of a Scheme of library classification.
- Role of DRTC, CRG and FID.
- Contribution of International Conferences towards classification research.
- BSO: Salient features.
UNIT-1 Research-
- Research: Concept, Meaning, need and process of research.
- Types of Research- Fundamental and Applied.
- Research Design- Types of research design, Identification and formulation of problem, Hypotheses.

UNIT-2 Research methods-
- Research Methods- Scientific, Historical, Descriptive, Survey and case study methods, Experimental method and Delphi Method.
- Research techniques & Tools- Questionnaire, Schedule interview, Observation and sampling techniques.

UNIT-3 Data analysis and Interpretation-
- Descriptive Statistics- Measures of central tendencies- Mean, Median, Mode.
- Tabulation and generalization.
- Standard Deviation and Correlation.
- Testing of hypotheses.

UNIT-4 Bibliometrics, Informatrics & Scientometrics-
- Bibliometrics, Informatrics & Scientometrics: Concept definition and their scope
- Content analysis,
- Sociometry.
- Citation studies- Citation-nature and definition, Citation-theory and analysis.
- Offset weight age formula of Sengupta.

UNIT-5 Research reporting- Designing research proposal-
- Structure, Style, Contents & Guidelines for Research reporting.
- Standards for citing bibliographical references (Like Chicago manual, MLA & Indian standards)
- Current trends in library and information science research.
UNIT-1 Management
- Management styles and approaches.
- Management schools of thought.
- Functions and Principles of Scientific Management.

UNIT-2 Financial Management-
- Resource mobilization.
- Budgeting technique & methods: PPBS. Zero based budgeting etc. Budgetary control.
- Cost effectiveness and cost benefit analysis.
- Total Quality Management (TQM)- Definition, Concept & elements of TQM and quality audit.

UNIT-3 System Analysis and Design-
- System- definition, Concept and characteristics.
- Library as a system.
- Project management,
- PERT/CPM.
- Decision tables.
- DFD (Data Flow Diagram).
- Work study: Flow chart, Gantt chart, Block diagrams.

UNIT-4 Planning-
- Concept, Definition, Need, Purpose, Types, Policien and Procedures.
- MBO,MBE
- Strategic management- Definition objectives. Policies process & models of strategic management.
- SWOT analysis.

UNIT-5 Managing Change
- Concept of change: changes in procedures, method.
- Use of new tools and techniques;
- Techniques of managing change.
- Collection development and management- Policies and procedures.
- Time and motion study.

PAPER-V INFORMATION PROCESSING AND RETRIEVAL (PRACTICE-1)
UNIT-I Subject analysis and representation-
- Problems of subject analysis and representation.
- Contributions of cutter, Ranganathan, Farradane and Coates.
- Principles of subject cataloguing- Assigning subject-Headings using library of Congress subject headings and sears list of subject heading etc.

UNIT-II Indexing language and vocabulary control-
- Indexing languages- Types and characteristics.
- Vocabulary control- Tools of vocabulary control.
- Thesaurus- Structure and construction of an IR Thesaurus. Thesaurofacet.
- Trends in automatic indexing.
- Recall and Precision devices in indexing languages.

UNIT-III Indexing systems-
- Pre coordinate and post coordinate indexing system.
- Outline study of the following indexing systems.
- KWIC, KOWC.
- Chain Indexing, PRECIS, POPS).
- Uniterm indexing, Citation indexing.
- Standards for Bibliographical Description: AACR-2, ISBD, MARC(Format), CCF

UNIT -IV Information Retrieval Systems-
- Definition, Types, Components and operational stages of IRS.
- Information Retrieval- Data Base, Information base and SQL, IR Models.
- Search Process- Principles & methods of searching.
- Search Techniques- Boolean searches On-line searching techniques and retrieval.

UNIT - V Information retrieval systems evaluation.
- Projects and parameters.
- Important test results- Cranfield, Medlars, Smart.
- Information retrieval through optical media and CD-ROM data base.
- IR through OPAC and Internet.
UNIT-I  Information sources-
- Documentary sources of information.
- Print, Non-print including Electronic Nature.
- Characteristics, Utility and evaluation of different types of information sources.
- Non Documentary Information sources; Human and institutional – Nature, Types, Characteristics and utility.
- Internet as a source of information.

UNIT-II Information services-
- Information services- Concepts, Definition need and trends.
- Techniques and evaluation of alerting services (CAS & SDI).
- Bibliographic, Referral.
- Document delivery and translation services.

UNIT-III Information Products-
- Information products- Nature, Concept, Types, Design and marketing Abstracting,
- Types and guidelines in preparing abstracts.
- Study and evaluation of important abstract periodicals information analysis, Repackaging and consolidation.

UNIT- IV User Educations-
- Goals and objectives, Levels, Technique and methods.
- Reference interview and search techniques.
- Resource sharing and library networking.
- Study of Indonet, Inflibnet, Calibnet, Nicnet, Delnet, Adinet, Malibnet.

UNIT-V
- International information system and network.
- AGRIS, BIOSIS, CAS, DEVSIS, ICSU, INIS, INSPEC, MEDLARS.
UNIT-II Information Technology -
- Definition, need, scope and objectives.
- Historical background of computers.
- Generation of computers.
- Architecture CPU, Input/output devices.
- Hardware and software.
- Operating system-Ms-windows, UNIX, MS-DOS.

UNIT-II Networking -
- Types of networks-LAN, WAN, MAN.
- Local Area Networks; LAN Topologies, Network Hardware- Network interface card, hubs/switches.
- Getaways/Bridges, routes, modem.
- Network Protocols- TCP/IP, Net-BUI, IPX.

UNIT-III Internet-Basic features and tools-
- Connectivity- Dialup, Leased lines, Microwave, ISDN.
- Digital Subscriber Lines (DSL).
- E-mail-Protocols- Telnet, FTP, DTTP. Web browsers, Web servers, Search Engines, Keta Search,
- Web design- SGML, HTML, DHTML and XML.

UNIT-IV Data Base Management System -
- Models- Hierarchical, Network, Relational and object oriented.
- Software- CDS/ISIS, SOUL.
- Structure Query Language. Artificial Intelligence.
- Digital libraries- definition, characteristics & attributes,
- Storage media formats- DVD.

UNIT-V Library Automation -
- Planning and implementation of library automation.

PAPER- IX
ELECTIVES; INFORMATION SYSTEMS (Any one o the following)
- IX-A Management Information Systems.
- IX-B Business Information Systems.
- IX-C Biotechnology Information Systems.
- IX-D Health science Information Systems.
- IX-E Agricultural Information Systems.
- IX-F Social Science Information Systems. (Note- In the initial stage only one information system, i.e. “IX-A; Management information Systems” is being implemented.)
Paper – IX
ELECTIVES; Information Systems (Any one of the following)
PAPER- IX-A
MANAGEMENT INFORMATION SYSTEMS.
FM 100(Theory 80 + Internal Assessment 20)

Pass Marks 36%

UNTII-I
- Definition, concepts, elements and objectives of M.I.S.
- Information and management effectiveness.
- Information needs and management levels,
- Features of MIS system approach to MIS.
- Properties of MIS.

UNIT-II
- Structure of MIS.
- MIS and decision making.
- Planning for MIS-Systems analysis; Systems design.
- Techniques of system analysis; Techniques for MIS planning.

UNIT-III Information Support System-
- Management reporting systems (MRS);
- Decision Support Systems (DSS);
- Office Automation Systems (OAS);
- Knowledge Based Systems.

UNIT IV Functional Informational Systems-
- Financial Information Systems; Marketing IS; & Human resource IS.
- Implementation, Evaluation & Maintenance of MIS.

UNIT V
- Role of Computer in MIS.
- Data Base Management.
- Data Base Software-Software needs selection and development.
- Data communication and networking.
- Using Information superhighways- Internet and Intranet.
Academic Library and Information System
FM 100(Theory 80 + Internal Assessment 20)
Pass Marks 36%

Unit – 1 Academic Library
- History and Development of Libraries with special reference to India
- Role of Academic Library in Education
- Academic Library as a support System for Education

Unit – 2 Development of Academic Library
- Role of UGC in Promoting Academic Libraries, University College and other Institutions
- Role of library authorities of the Institutions in Promoting Library Resources
- Development of Library Services
- Financial Management of Academic Libraries

Unit – 3 Collection Developments
- Collection Development Policy, Weeding policy
- Problems in Collection Organization in an Academic Library
- Collection Development Programmes, Allocation of Funds to Collection Procurement,
- Curriculum and Collection Development
- Library Committees and their Role in Collection Development

Unit – 4 Staffing and Staff Development for Academic Library
- Norms and Patterns for Staffing in University, College and School Libraries
- Continuing Education Programmes for Academic Library Development
- Personal Management in Academic Library

Unit – 5 Resource Sharing Programmes
- Resource Sharing Services – its Objectives, Organization and Development
- INFLIBNET and its Implications to Library Resource Sharing
- Regional and City Network of Libraries and their Importance
Unit – 1 History and Development
- History and Development and types of Archival Centers
- Kind and identification of Archival material

Unit-2 Organization and Management of Archival and Manuscripts
- Acquisition, Classification, Cataloguing and Indexing of Archival material
- Source material on Archival, Manuscripts
- Machine Readable and Microfilm of Archival records
- Database and Digitization of Archives
- Role of UNESCO and other agencies

Unit -3 Environment Control
- Building Design
- Planning and furniture and Fillings
- Use of Copy Right to information in relation to archives

Unit – 4 Preservation of Archives
- Objective and Purpose
- Cause of Deterioration
- Environmental Pollution : Physical, Chemical and Atmospheric
- Biological enemies of materials : Mould, Fungi, Insect and Rodents

Unit – 5 Rehabilitation of Documents
- Cleaning, removal of Stains
- Fuming and deacidification
- Repair and restoration techniques
- Lamination
- Standards for Storage Conditions
Unit – 1 Agriculture Education and Agriculture Libraries
- Growth and development of Agriculture education and research in India
- Role of Library in Agricultural education, research and Extension
- Development of Agriculture Library in India

Unit – 2 Information Source and Services in Agriculture
- Specialized Collection and Information Sources
- Information Service and products in Agricultural Science and Technology with special reference to India
- Agriculture Information Centers - National and International

Unit-3 Organization and Management of Resources
- General Principle of Information Management
- Information Organization, Processing and Dissemination
- Developing need based and on Demand Specialized Services

Unit – 4 Information Needs
- Identifying special need of Agricultural faculty & research Staff
- User Studies of Local Agriculture Libraries

Unit – 5 Agriculture Information System and Networks
- Current Trends in agricultural System and Networks
- Resource Sharing and Networking in Agricultural Libraries in India
- International Agricultural Database
- Professional Associations.
Unit- 1 Law Librarianship
- Growth and Development of legal Institutional in India
- Nature Principle and Characteristics of legal Information and Law Libraries
- Type of Law Library

Unit – 2 Information Source Collections
- Special Information Sources : Bills , Acts , Books , Serials , Law Court notice ,
- Law case amendments
- Tribunal Report, Law Digests , Legal Judgment, Delegation Legislation
- Rules and orders , Legal information Sources and Lexicons

Unit – 3 Organizations and Management of Resources
- Information Processing : Classification, Cataloguing and Indexing
- Developing special skills and Techniques to handle legal information ( personnel )
- Managing finance : Funds & Fund Generation

Unit – 4 Information need and services
- Special needs of lawyers and legal Professionals
- Study of Law Information Centers ( Local )
- Special Services, Planning and design
- Preparation of rapports on Law Libraries ( Local )
- Dissemination methods and techniques

Unit – 5 Legal Information System & Networks
- Legal information System :National and International
- Structure and their services
- Legal Database and Digital Libraries
- Resource and Networks of Legal Information
Unit – 1 Growth and Development of Industries & Industrialization Libraries
- Industrial Growth in India
- Type of Industries: Government and Non-Government.
- Role of Libraries and Information Center in Industries
- Categories of Industrial Libraries

Unit – 2 Industrial Information Resource Collections
- Tread Literature
- Patents
- Standards
- Technical Reports Bulletins

Unit – 3 Organizations and Management of Industrial Information
- Special Classification Scheme and Indexing System
- Planning and Designing Specialized information services and Products
- System approach to Planning and Design and Implementation
- Managing personal Skills and Finance

Unit – 4 Information needs and Services of Industrial Libraries
- Special Classification Schemes and Indexing System
- Case Studies and field Experience of local Industries
- Preparation of Report of an Industrial Library Survey (Local)
- Marketing of Information
- Computerized Information Service

Unit – 5 Industrial Information System and Network
- Industrial Information Centers and Networks National and International
- (SENDOC)
- Structure and their services
- Industrial Databases
- Resource Sharing and Networking of Industrial Information Centers in India