

**PANJAB UNIVER**  
(Estd. under the Panjab Ur



**PANJAB UNIVERSITY, CHANDIGARH**

**SCHEME OF MASTER OF LIBRARY AND INFORMATION SCIENCE (SEMESTER SYSTEM).**

Paper Code	Title of the Paper	Internal Assessment	Marks		Hours
			Ext. Exam.	Total	
<b>FIRST SEMESTER</b>					
MLIS 01	Information Sources and Services (Practical)	20	80	100	3
MLIS 02	ICT in Libraries (Theory)	20	80	100	3
MLIS 03	Information Consolidation, Storage and Retrieval	20	80	100	3
MLIS 04	Research Methods and Statistical Techniques	20	80	100	3
<b>SECOND SEMESTER</b>					
MLIS 05	Information and Communication	20	80	100	3
MLIS 06	ICT in Libraries (Practical)	20	80	100	3
MLIS 07	Information Systems:				
	Option A– Social Science Information Sources and Systems	20	80	100	3
	Option B–Business Information Sources and Systems	20	80	100	3
	Option C – Health Science Information Sources and Systems	20	80	100	3
MLIS 08	Management of Library Systems				
	Option A – Public Library System	20	80	100	3
	Option B – Academic Library System: College & University Libraries	20*	80	100	3
	Option C – Special Library System	20	80	100	3

**\* Field Work:**

- i) The Field Work (of four to six days duration wherein the students would be visiting different types of libraries) would be an integral part of curriculum of the course of Master of Library & Information Science (Semeste.9665(L)324.404102(n)2.75825( )-1.57638(r)-2.34889(e)16.

## **I. Programme Outcomes**

Upon completion of the MLIS program, students will be able to:

1. Demonstrate awareness of the foundational principles of library and information profession.
2. Use the basic principles related to selection, evaluation, organization, and preservation of physical and digital information sources.
3. Explain, analyse and interpret professional and scholarly literature.
4. Articulate the importance of designing services as per the users' needs.
5. Apply the fundamental principles of planning, management, marketing, and advocacy.
6. Design and evaluate information retrieval systems.
7. Demonstrate proficiency in using current and emerging Information and Communication Technologies.
8. Effectively administer and manage Libraries and Information Centers.
9. Apply current management practices in the creation, administration and assessment of services.
10. Demonstrate professional leadership and communication skills.
11. Demonstrate understanding of quantitative and qualitative research methods.
12. Enhance their skills for generating new knowledge through research.
13. Develop capacity to apply core ethical principles in professional and everyday practice.
14. Demonstrate professionalism as librarians information specialists.

## **II. Programme Specific Outcomes:**

1. Students can collect, organize and preserve information sources for future access and dissemination.
2. Students can design and implement services to facilitate the discovery, identification, dissemination and use of recordable information and knowledge in any format for effective access.
3. Students can understand the values of patron privacy, equitable access, intellectual freedom, and ethical use of information.
4. Students can perform and access research based practices through the application of information literacy and research methods including data discovery, analytics and qualitative measures.
5. Students can demonstrate knowledge and skills related to the role and impact of information policies and practices in a rapidly changing information society.
6. Students learn the human information behaviour in order to develop and implement systems and services that meet users' needs for information.
7. Students understand the philosophy, principles, and legal and ethical responsibilities of professionals in the field.
8. Students can demonstrate understanding of procedures of all housekeeping operations of libraries using Information and Communication Technologies.
9. Students can demonstrate automation of library using Open Source ILMS.
10. Students can build digital library using Open Source Software and Web Applications.
11. Students can demonstrate skills in managing and carrying out professional activities in various sections of library.
12. Students can demonstrate skills in document circulation, reference and information services, Internet and database searching.
13. Students can demonstrate managerial skills that offer job opportunities as librarians/information professionals in different types of libraries.

14. Students can demonstrate professional attitude through commitment for providing every



9. ProQuest . <https://www.proquest.com/>
10. ScienceDirect. <https://www.sciencedirect.com/>
11. Scopus. <https://www.scopus.com/>

**Further Readings:**

1. Panjab University Library website <<https://library.puchd.ac.in/>>
2. Smith, Linda C. and Wong, Melissa A. (2016). *Reference and Information: An Introduction (5th ed)*. Santa Barbara: ABC-CLIO.

**Paper Code: MLIS 02**

**Paper Title: ICT in Libraries (Theory)**

**Objective:** To provide the basic knowledge of computer and its applications in library and information activities to the students.

**INSTRUCTIONS FOR THE PAPER-SETTERS / EXAMINERS AND CANDIDATES:**

- i. The theory question paper will be of 80 marks of 3 hours duration and 20 marks will be for internal assessment.
- ii. The syllabus has been divided into four units.

There shall be **9** questions in all. The first question will be compulsory consisting of 15 short answer type questions spread over the whole syllabus to be answered in about 25 to 30 words each. The candidates will be required to attempt any 10 short answer type questions carrying 20 marks (i.e., 2 marks for each). Rest of the paper shall contain **4** units. Each unit shall have **two** questions of 15 Marks each, and the candidates shall be given internal choice of attempting one question from each Unit. In no case a question should be asked from outside the syllabus. The question paper should be strictly according to the instructions mentioned above.

**Learning Outcomes:**

i)-11.0937(b)2.75825(0)1204(1402)(0)7.711055d(rs)7.39675(t)-11.0951(i)04889( )-4.40417( )T.0951(d)2.75825(a)st.39675( )9(/)278TJ ET C







**Essential Readings:**

1. Ali, P.M.N. (2014). Information Analysis, Consolidation and Repackaging. *Journal of Knowledge & Communication Management*, 4(1), 98.
2. Bates, M.J. (2011). *Understanding information retrieval systems: Management*,
3. Cleveland, D.B., & Cleveland, A.D. (2013).

**Learning Outcomes:**

After studying this course, students shall be able to:

1. Understand the stages of research.
2. Comprehend the paradigms of research in terms of qualitative and quantitative approaches.
3. Formulate research questions and hypotheses.
4. Apply the research methods in the field of in Library and Information Science.
5. Construct the suitable research instrument to gather the data.
6. Apply various sampling techniques to select representative sample from target population.
7. Understand the basics of descriptive and inferential statistics.
8. Apply various techniques for measuring research output.
9. Acquire knowledge on the structure, style and content of research report writing.

**Unit – I: Concept of Research**

- Research: Definition, meaning, objectives and characteristics
- Types of research
- Qualitative and Quantitative Approaches: An Introduction.
- Identification and formulation of research problem.
- Literature review.
- Spiral of Scientific method
- Hypothesis: features, types and formulation.
- Research Process

**Unit – II: Research Methods, Techniques and Tools**

- Research Design: An Introduction.
- Research Methods: Historical, Survey, Experimental and Case Study (their application in Library and Information Science).
- Data collection tools: Questionnaire, Interview and Observation.
- Sampling techniques: Probability and non-probability.

**Unit – III: Data Analysis and Its Techniques**

- Descriptive and inferential statistics: An Introduction.
- Measures of Central Tendency: Mean, Mode, Median.
- Measures of Dispersion. Mean deviation and Standard deviation.
- Representation of Data: Tabular and graphic.
- Computerized data analysis: Introduction to SPSS.

**Unit – IV: Research Reporting and Metrics**

- Research Report: Structure, style, contents and guidelines.
- Reference Styles: APA(latest edition)
- Bibliometrics: Concept, definition and laws.
- Scientometrics, Infometrics and Webometrics: Concept, definition and their relationship.

**Essential Readings:**

1. 83dmenzha01d-(B)7.8650.468649(e4.3217( )TJ 1.00325 0 638(n)1.08638(w)5.04503(s)18.s)31400015(.).250

5. Loseke, D. R. (2017). *Methodological Thinking: Basic Principles of Social Research Design*. SAGE Publications.
6. Merriam, S.B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4<sup>th</sup> ed.). California: Jossey Bass.
7. Pickard, A. J. (2017). *Research methods in information* (2<sup>nd</sup> ed). London: Facet Publishing.
8. Punch, K.F. (2013). *Introduction to social research: Quantitative and qualitative approach* (3<sup>rd</sup> ed.). London: Sage Publishing.
9. Wildemuth, B.M. (2017).

**SEMESTER – II**



**Paper code: MLIS 06**

**Paper Title: ICT in Libraries (Practical)**

**Objective:** To acquaint the students with the working of library automation software, digital library software and library website design.

**INSTRUCTIONS FOR THE PAPER-SETTERS / EXAMINERS AND CANDIDATES:**

- i. The practical examination will be of 80 marks of 3 hours duration and 20 marks will be for internal assessment.
- ii. The examiner for the practical paper will assess the examinees on the basis of their practical performance (60 marks) and viva (20 marks)
- iii. In no case a question should be asked from outside the syllabus. The question paper should be strictly according to the instructions me

10. PRESERVICA: *Active Digital Preservation*. <https://preservica.com>  
*Software Koha Prototype Model of Centralized Library System of Sinhgad Institute's  
 Higher Education Libraries*. Saarbrücken: Lap Lambert Academic Publishing.
10. Weebly. <https://www.weebly.com>

**Further Reading:**

1. Faruk, M. O. (2017). *User-centered library website design*. Saarbrücken: Lambert Academic Publishing
2. Francabandera, L. (2018). *Making library websites accessible: A practical guide for librarians*. Lanham, Maryland: Rowman & Littlefield.

**Paper Code: MLIS 07**

**PAPER TITLE: INFORMATION SYSTEMS:**

**OPT. (A): SOCIAL SCIENCE INFORMATION SOURCES AND SYSTEMS**

**Objectives:** To acquaint the students about the Information Sources and Networks in the field of Social Sciences.

**INSTRUCTIONS FOR THE PAPER-SETTERS / EXAMINERS AND CANDIDATES:**

- (i) The theory question paper will be of 80 marks of 3 hours duration and 20 marks will be for internal assessment.
- (ii) The syllabus has been divided into four units.

There shall be **9** questions in all. The first question will be compulsory consisting of 15 short answer type questions spread over the whole syllabus to be answered in about 25 to 30 words each. The candidates will be required to attempt any 10 short answer type questions carrying 20 marks (i.e., 2 marks for each). Rest of the paper shall contain **4** units. Each unit shall have **two** questions of 15 Marks each, and the candidates shall be given internal choice of attempting one question from each Unit.

**Learning Outcomes:**

After studying this course, students shall be able to:

1. Examine the structure and development of Social Sciences.
2. Know the recent research trends in the field of Social Sciences.
3. Know about the Social Science Information Sources, products and services.
4. Critically evaluate various social sciences information sources.
5. Develop acquaintance with the role of national and International Social Science Institutions engaged in Information generation and dissemination.
6. Evaluate the Social Science Databases and Repositories.
7. Understand the role of social science associations and networks in the upliftment of social sciences.

**Unit – I: Structure and Development of Social Sciences:**

- Social Sciences: Definition, scope, landmarks and research trends.
- Political Science: Definition, scope, landmarks and research trends.
- Economics: Definition, scope, landmarks and research trends.
- Sociology: Definition, scope, landmarks and research trends.
- History: Definition, scope, landmarks and research trends.

**Unit – II: Social Science Institutions engaged in Information generation and dissemination:**

- Role of Social Science Institutions:



- Centre for Policy Research.
- Indian Council of Social Science Research.
- Indian Institute of Public Administration.
- National Council for Applied Economic Research.
- Tata Institute of Social Sciences.
- Indian Council of Historical Research.
- United Nation Educational Scientific and Cultural Organisation (UNESCO).

**Unit – III: Social Science Information System, Associations and Networks:**

- Information System: Concept and evaluation.
- Information Associations in Social Sciences:
  - International Political Science Association.
  - International Sociological Association.
- Information Networks in Social Sciences:
  - SocioSite
  - Social Science Research Network (SSRN).

**Unit – IV: Social Science Aggregators, Databases and Repositories:**

- Evaluation of the following Databases:
  - J-STOR.
  - J-Gate.
  - Project Muse.
  - Shodhganga
  - Networked Digit Library of Theses and Dissertations (NDLTD).
  - UN Data.
  - OpenDOAR (Directory of Open Access Repositories)
  - DOAJ. (Directory of Open Access Journals)

**Essential Readings:**

1. Association of Librarians and Information Professionals in the Social Sciences. (2010). *Innovations in social sciences information and research support*. London: Association of Librarians and Information Professionals in the Social Sciences.
2. British Library. (2006). *Social science search: The complete research service*. London: British Library.
3. DOAJ. <https://doaj.org/>
4. Fisher, David and Price, Sandra. (2018). *Information Sources in the Social Science*. Munchen:Saur
5. Harmon-Jones, E. &Winkelman, P. (2006). *Fundamentals of social science*. New York: Guilford.
- 6.

**Paper Code: MLIS 07**

**Paper Title: INFORMATION SYSTEMS:**

**OPT. (B): BUSINESS INFORMATION SOURCES AND SYSTEMS**

**Objectives:**

To make the students aware of the Business Information System.

**INSTRUCTIONS FOR THE PAPER-SETTERS / EXAMINERS AND CANDIDATES:**

- (i) The theory question paper will be of 80 marks of 3 hours duration and 20 marks will be for internal assessment.
- (ii) The syllabus has been divided into four units.

There shall be **9** questions in all. The first question will be compulsory consisting of 15 short answer type questions spread over the whole syllabus to be answered in about 25 to 30 words each. The candidates will be required to attempt any 10 short answer type questions carrying 20 marks (i.e., 2 marks for each). Rest of the paper shall contain **4** units. Each unit shall have **two** questions of 15 Marks each, and the candidates shall be given internal choice of attempting one question from each Unit.

**Learning Outcomes:**

After studying this course, students shall be able to:

1. Understand the nature and characteristics of business information.
2. Acquaint with the components of Industrial Information System.
3. Know about the Industrial Information sources, products and services.
4. Develop acquaintance with the role of industrial Institutions and networks.
5. Organise business information for end user.

**Unit – I Business Information:**

- Nature and characteristics: Its role, generation and utilization.
- Systems view of business information.
- Components of Business Information Systems: Resources, centres, consultants, suppliers, financial organisations, industrial promoters, etc.
- Users of business information: Categories, role, functions, and need.

**Unit – II Business Information Sources and Products**

- Sources of Information: Directories, Digests, Market, Research Reports, Trade Literature, Technical Notes, Company Profiles, Patent, Design and Trade Marks, Standards, Databases.
- Information services: CAS, SDI, Technical Enquiry Service, other computerised services.

**Unit – III Business Information Institutions and Networks:**

- Information Networks: overview of Business Information Networks.
- Activities of: Indian Institute of Foreign Trade (IIFT), India Trade Promotion Organisation (ITPO), Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce and Industry (FICCI), United Nations Industrial Development Organization (UNIDO), United Nations Conference on Trade and Development (UNCTAD)

**Unit – IV: Organising Business Information for End user Support**

- Database System: Business Measurement System
- Business Planning System. Text Management System: Text retrieval system
- Office systems Management Support Systems: Decision support systems; information centres.

**Essential Readings:**

1. Ahituv, N.I.V. (1994) *Principles of Information System for Management*. USA: Business and Educational Technologies.
2. Atherton, P. (1980). Handbook for information systems and services. In *Handbook for information systems and services*. Paris: UNESCO.
3. CII. Confederation of Indian Industry. <https://www.cii.in/>
4. Curtis, G., & Cobham, D. (2008). *Business information systems: Analysis, design and practice*. NY: Pearson Education.
5. FICCI. <https://ficci.in/>
6. IIFT. <https://www.iift.ac.in/iift/index.php>
7. ITPO | India trade promotion organisation. <https://www.indiatradefair.com/>
8. United National Conference on Trade and Development. <https://unctad.org/>
9. United Nations Industrial Development Organization. <https://www.unido.org/>

**Further Readings:**

1. Dossett, P. (Ed.). (1992). *Handbook of special librarianship and information services* (6th ed.). London: ASLIB.
2. Garland, J. L. (1986). *How to develop Business information systems for End User*.
3. Wasserman. (1983). *Encyclopaedia of business information sources*. Boston: Cengage.

**Paper Code: MLIS 07****PAPER TITLE: INFORMATION SYSTEMS:****OPT. (C): HEALTH SCIENCE INFORMATION SOURCES AND SYSTEMS****Objectives:**

- Literature search.
- Users of Health Science information.

**Unit – II Health Science Information Sources:**

- Sources of Information:
  - Printed
  - Non-print. (List to be provided by the concerned teacher).

**Unit –III Health Science Information Institutions:**

- National Medical Library (NML).
- World health Organisation (WHO).
- Indian council of Medical Research (ICMR).
- Department of Biotechnology (DBT).
- National Institute of Health and Family Welfare.
- Central Drug Research Institute (CDRI).
- Central Institute of Mining and Fuel Research (CFRI).
- Central Food Technological Research Institute (CFTRI)
- National Institute of Nutrition (NIN).
- National Institute of Immunology (NII).
- National Informatics Centre (NIC)

**Unit – IV: Information Systems and Networks:**

- Health Literature, Library, and Information Services (HELLIS).
- Medical Literature Analysis and Retrieval System (MEDLARS)
-





**UNIT- I: Academic Libraries**

- Academic Libraries: Definition, Aims, Objectives and Types.
- Role of UGC in Strengthening Academic library system in India.
- Academic Library as a Space/Place: Concept, Significance and Components.
- Library Learning Commons. Library Maker spaces in Academic Libraries.
- Library Research Support (LRS): Concept, Relevance and Scope.

**UNIT- II: Collection Development and Evaluation**

- Collection Development Policy (CDP): Concept, Need and Elements.
- Evidence-Based Acquisition Model (EBA): Concept, Significance and Features. Concept of Demand-Driven Acquisition (DDA)/Patron-Driven Acquisition (PDA).
- Collection Evaluation and Assessment Methods: Quantitative and Qualitative Techniques
- Creative commons (CC): Concepts & Types of Licenses.

**UNIT- III: HRM and Library Quality Management**

- Performance Appraisal: Need, Importance & Evaluation Process in Indian Academic Libraries.
- Professional Development of Library Staff: Concepts & Need. Opportunities for Continuous Professional Development CPD.
- Library Quality: Concept and Components of TQM and Six-Sigma.
- NAAC Quality Indicators in Library and Information Services: College and University Libraries.

**UNIT- IV: Open Courseware, Green Library & Marketing**

- Open Courseware and MOOCs: Concepts, Significance and Role of Academic Libraries.
- NMeICT initiatives: ePG-Pathshala and SWAYAM
- Green Libraries: Concept, Need & Features.
-

**Further Readings:**



- MEDLARS
- INIS
- INSPEC
- AGRIS
- Patent Information System
- AccessScience

**Unit – IV: Resource Sharing**

- Resource Sharing: Concept, areas and factors of Development
- Role of CSIR, DRDO and BARC
- Role of SLA and IFLA Section on Special Libraries

**Essential Readings:**

1. Avon. (2021). Creative planning of special library facilities. London: Routledge.
2. Matarazzo, J.M., & Connolly, S.D. (2016). *Knowledge and special libraries*. London; Taylor & Francis Group.
3. Murray, Tara E (2013), The specialist. Journal of library administration. 53, 274 – 282.
3. Rob8353(h)-8.80552(e)1g.1402( )-4.4orraye 3, 232.342/R9 10.32.75825(8)2.7.(a)16.1402(9(E)9.66f6f4.4041