M.LISc. Library and Information Science Program and Course Outcome.

Program Specific Outcomes

After successful completion of program, students will be able to:

- 1. The MLISc program offers a comprehensive and well-rounded education in Library and Information Science.
- 2. Throughout the program, students develop a deep understanding of fundamental principles, including information management, cataloging, and classification.
- 3. They acquire essential computer skills and become proficient in technology, digital libraries, and automation.
- 4. The curriculum places a strong emphasis on research methodology, information literacy promotion, and resource management.
- 5. Graduates emerge with the ability to appreciate the historical and philosophical foundations of librarianship and the Information Society.
- 6. They are adept at navigating the complexities of information resources, conducting research, and applying ethical standards in their work.
- 7. The program equips them to address contemporary challenges in libraries and information centers while staying current with emerging trends and technologies.
- 8. Furthermore, students gain valuable hands-on experience in managing academic library systems and services, including collection development, user education, and various library services.

Semester I Paper Title - 1.1: Foundation of Library and Information Science Student Learning Course Outcomes

- 1. Understand the concept of professionalism in librarianship, encompassing generic attributes, ethical considerations, and essential qualities.
- 2. Explore the Science of Librarianship, including aspects such as the universe of knowledge, classification, cataloging, indexing, thesaurus development, abstracting, and Knowledge Organization Systems (KOS).
- 3. Assess the role of librarians as knowledge managers and information specialists in organizing and disseminating information effectively.
- 4. Investigate the genesis, development, and roles of national and international Professional Associations and Organizations in the field of Library and Information Science.
- 5. Analyze the contributions of key organizations, including ILA, IASLIC, IATLIS, KALA, ALA, SLA, CILIP, IFLA, RRRLF, and UNESCO, in advancing LIS services and advocacy.
- 6. Recognize the necessity and objectives of Library Legislation.
- 7. Examine the functions and principles underlying library legislation, with a focus on specific acts such as the Karnataka Public Library Act, 1965, and the Digital Millennium Act, 1996.

- 8. Assess the impact of legislative frameworks on the development and governance of libraries.
- 9. Critically analyze the Five Laws of Library Science and their relevance in the contemporary information society.
- 10. Explore variations and adaptations of the Five Laws and their implications for modern library practices.

Semester I Paper Title - 1.2: Information Sources and Services Student Learning Course Outcomes

After successful completion of this course, students will be able to: -

- 1. Understanding the significance of information sources in research and decision-making processes across various domains.
- 2. Identifying and categorizing different types of information sources, including primary, secondary, and tertiary sources.
- 3. Analyzing the characteristics of information sources to determine their suitability for specific research needs and contexts.
- 4. Exploring the diverse uses of information sources in academic, professional, and personal settings to acquire knowledge and support decision-making.
- 5. Recognizing the importance of primary sources in original research and knowledge creation, including periodicals, technical reports, patents, etc.
- 6. Evaluating the role of secondary sources such as dictionaries, encyclopedias, and bibliographies in providing background information and aiding in literature review.
- 7. Understanding the significance of tertiary sources like directories and guides to subject literature in facilitating access to specialized information.
- 8. Appreciating the value of human sources such as consultants, experts, and information brokers in providing specialized knowledge and expertise.
- 9. Exploring the role of institutional sources, including national and international agencies, government departments, and academic institutions, in generating and disseminating information.
- 10. Analyzing the impact and implications of electronic information sources, including e-journals, databases, and e-learning resources, in the digital age, and evaluating their benefits and challenges for users.

Semester I Paper Title - 1.3: Library Classification (Theory) Student Learning Course Outcomes

- 1. Understanding the concept of library classification, its meaning, and definition, and recognizing its importance in organizing and retrieving information efficiently.
- 2. Exploring the need, purpose, and functions of library classification systems in facilitating access to knowledge resources for users.

- 3. Analyzing the modes of formation of subjects and understanding the processes involved in knowledge classification and book classification.
- 4. Examining the history, development, and structure of prominent library classification schemes such as Dewey Decimal Classification (DDC), Universal Decimal Classification (UDC), and Colon Classification (CC).
- 5. Investigating the theory of library classification, including the planes of work, laws, canons, principles, and postulates underlying the organization of information.
- 6. Understanding fundamental categories in library classification such as PMEST (Personality, Matter, Energy, Space, Time), facet analysis, facet sequence, phase relation, and common isolates, and special isolates.
- 7. Exploring the concept of notation in library classification, its meaning, definition, need, types, functions, and qualities, and understanding mnemonic techniques used for notation.
- 8. Analyzing trends in library classification, including automatic classification techniques and web-based systems like Web Dewey.
- 9. Understanding knowledge organization systems (KOS), including concepts like ontology, folksonomy, Web Ontology Language (OWL), Simple Knowledge Organization System (SKOS), and taxonomy.
- 10. Exploring the role of library classification systems in the digital age and their adaptation to emerging technologies and user needs.
- 11. Evaluating the challenges and opportunities in implementing and managing library classification systems in diverse information environments.
- 12. Investigating current research and developments in library classification, including efforts to enhance interoperability, multilingual access, and semantic enrichment of classification systems.

Semester I Paper Title - 1.4 Basics of Computer (Theory)

Student Learning Course Outcomes

- 1. Understand IT evolution, application in libraries, and efficient information management and dissemination.
- 2. Explore computers' types, generations, capabilities, limitations, and their role in information management.
- 3. Identify computer hardware components: memory, storage devices, input/output devices.
- 4. Understand computer software: systems software, operating systems, application software packages like MS Office.
- 5. Explore data representation, manipulation techniques, including bits, bytes, codes, number systems.
- 6. Understand programming basics: steps, algorithms, flowcharts, programming languages like BASIC, PASCAL, C++.

- 7. Explore file organization concepts, including fields, records, files, databases, and their methods.
- 8. Analyze Internet's historical development, role of web browsers, search engines, and search strategies.
- 9. Evaluate IT's impact on library practices, including digitization, online cataloging, and democratization of information.
- 10. Investigate emerging IT trends, challenges, and implications for libraries, including cybersecurity and artificial intelligence.

Semester I Paper Title-1.5: Information Sources and Services (Practical - I) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Understand information sources in print, electronic, and multimedia formats across subjects.
- 2. Identify and evaluate credibility, accuracy, and authority of information from various sources.
- 3. Develop search skills for effective retrieval from online catalogs, databases, and repositories.
- 4. Synthesize information from multiple sources to support research and construct arguments.
- 5. Recognize ethical and legal considerations in information use and adhere to best practices.
- 6. Apply critical thinking to analyze, interpret, and make informed decisions based on evidence.

Semester I Paper Title-1.6: Library Classification (Practical - I) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Mastery in categorizing documents (simple, compound, complex, electronic) using the latest Dewey Decimal Classification Scheme.
- 2. Efficient navigation of the Dewey Decimal Classification system for assigning classification numbers to various document types.
- 3. Understanding the vital role of Dewey Decimal Classification in organizing information for easy retrieval and access in libraries and information centers.

Semester I Paper Title-1.7: Basics of Computer (Practical - I) Student Learning Course Outcomes After successful completion of this course, students will be able to:

- 1. Practical familiarity with computer hardware components and operating systems including MS-DOS, MS-Windows, Linux, and software applications like MS-Office (Word, Excel, PowerPoint).
- 2. Proficiency in hands-on tasks and work assignments involving the utilization of various computer components and software platforms.
- 3. Ability to perform tasks effectively using MS-DOS, MS-Windows, Linux, and MS-Office applications (Word, Excel, PowerPoint) to meet academic and professional requirements.

Semester II Paper Title - 2.1: INFORMATION SOCIETY AND LITERACY Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Understand data, information, and knowledge; their characteristics and practical applications.
- 2. Proficient in communication modes, channels, and overcoming barriers for effective exchange.
- 3. Analyze the evolution of the information society and the roles within the industry.
- 4. Evaluate social, political, and ethical implications, including IP rights and data security.
- 5. Demonstrate competence in various literacies across proficiency levels.
- 6. Apply established models like SCONUL, Empowering 8, ALA, and IFLA ACRL.
- 7. Develop skills for user education, addressing current challenges.
- 8. Engage in critical thinking for navigating complex information landscapes.
- 9. Utilize information resources ethically, respecting copyright and fair use.
- 10. Contribute to national and international information policies and programs.

Semester II Paper Title - 2.2: MANAGEMENT OF HYBRID AND DIGITAL LIBRARIES Student Learning Course Outcomes

- 1. Understand the concepts, scope, and various management styles applicable to library and information centers.
- 2. Gain proficiency in human resource management, including recruitment, motivation, training, and performance appraisal within library contexts.
- 3. Learn financial management techniques such as budgeting, costing, and outsourcing relevant to library operations.
- 4. Acquire skills in maintaining library records, compiling annual reports, and utilizing library statistics for decision-making.
- 5. Master library operations including collection development, technical processing, circulation control, and stock management.
- 6. Explore the design and planning of libraries as systems, incorporating total quality management and technology management principles.

- 7. Understand the principles and factors involved in designing hybrid and digital library buildings, adhering to relevant standards.
- 8. Learn marketing concepts and strategies for information products and services, including market segmentation and promotion techniques.
- 9. Develop the ability to analyze and assess information needs and effectively position library services within the market.
- 10. Recognize the role of librarians in marketing LIS products and services, conducting marketing audits, and adapting to changing user needs.

Semester II Paper Title - 2.3 : LIBRARY CATALOGUING (THEORY) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Understand the purpose and functions of library catalogues, including OPAC and Web-OPAC systems.
- 2. Learn about normative principles governing library cataloguing, including laws, canons, and ethical principles.
- 3. Explore the history and features of key catalogue codes such as the Classified Catalogue Code and AACR-II(R).
- 4. Master catalogue entries and filing principles, including different kinds of entries and filing rules.
- 5. Study subject heading systems like the Chain Procedure, Sears List, and Library of Congress Subject Headings.
- 6. Understand cooperative and centralized cataloguing concepts, union catalogues, and tools like IndCat, OCLC, and WorldCat.
- 7. Analyze trends in cataloguing electronic and internet resources, including standards for bibliographic description such as ISBD and MARC 21.
- 8. Explore metadata standards like Dublin Core, FRBR-RDA, and BIBFRAME for organizing electronic resources.
- 9. Apply cataloguing standards and metadata principles to ensure consistency and interoperability in bibliographic records.
- 10. Keep abreast of evolving practices and technologies in cataloguing to adapt to the changing landscape of information organization.

Semester II Paper Title - 2.4: LIBRARY AUTOMATION (THEORY) Student Learning Course Outcomes

- 1. Understand the concept, history, and necessity of library automation, along with its various application areas.
- 2. Analyze internal and external factors influencing library automation strategies, identifying prerequisites and tasks involved.

- 3. Identify infrastructure requirements for library automation, including manpower, hardware, software, and associated costs.
- 4. Explore the automation of housekeeping operations such as acquisition, cataloguing, circulation, and serial control, emphasizing roles and rationale.
- 5. Evaluate different library software packages like SOUL, Easylib, and Koha, considering their features and suitability for automation needs.
- 6. Examine library technologies including security systems, discovery tools, and semantic technology, and their role in enhancing library services.
- 7. Explore the concept and evolution of artificial intelligence in libraries, its applications, advantages, and limitations, along with relevant tools like ChatBots and Semantic Scholar.

Semester II Paper Title - 2.5: INFORMATION LITERACY

Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Gain insight into library types, functions, and services across academic, special, public, corporate sectors.
- 2. Understand information source hierarchy and essential library tools, services, and facilities.
- 3. Explore electronic resources like e-journals, e-books, databases, e-learning platforms, and open access initiatives.
- 4. Examine open access resources' concept, impact, including OA journals, books, directories, OER, and MOOCs.
- 5. Delve into information literacy concept, recognizing its importance, and historical development.
- 6. Learn effective information organization and presentation methods, including style manuals and citation formats.
- 7. Develop information literacy skills through structured programs, studying international initiatives, and lifelong learning components.

Semester II Paper Title - 2.6: LIBRARY CATALOGUING (PRACTICAL) Student Learning Course Outcomes

- 1. Practice cataloguing simple documents like books and journal articles according to AACR-II (R) guidelines.
- 2. Learn to catalogue composite documents such as edited volumes or conference proceedings accurately.
- 3. Master cataloguing complex materials like multimedia resources or multi-volume sets with attention to detail.

- 4. Ensure uniformity and consistency in cataloguing practices throughout, following AACR-II (R) rules.
- 5. Apply additional standards or conventions, such as ISBD for serials, as required for specific formats.
- 6. Engage in hands-on exercises to create cataloguing records for various materials and formats.
- 7. Participate in discussions and feedback sessions to reinforce learning and clarify doubts.

Semester II Paper Title - 2.7: LIBRARY AUTOMATION (PRACTICAL) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Gain practical experience with library software packages, specifically SOUL and Koha.
- 2. Complete hands-on assignments utilizing functionalities within SOUL and Koha.
- 3. Learn to perform tasks such as cataloguing, circulation management, and patron management using the software.
- 4. Each student must maintain a practical record documenting their work with the software.
- 5. Practical records will be assessed during practical examinations to evaluate students' proficiency with the software.
- 6. Explore the features and capabilities of SOUL and Koha for library automation purposes.
- 7. Engage in troubleshooting and problem-solving exercises to address issues encountered during software usage.
- 8. Develop familiarity with the user interface and navigation of both SOUL and Koha platforms.
- 9. Gain practical insights into the management of library automation systems.
- 10. Apply theoretical knowledge of library automation concepts to real-world scenarios through practical exercises with SOUL and Koha.

Semester III Paper Title - 3.1: RESEARCH METHODOLOGY Student Learning Course Outcomes

- 1. Understand research's purpose, types, and scientific methods in Library and Information Science.
- 2. Learn literature review, problem identification, and research design essentials.
- 3. Grasp hypothesis formation principles and types, ensuring quality.
- 4. Explore research methods like historical, experimental, and survey techniques, along with bibliometrics and webometrics.
- 5. Familiarize with sampling techniques and considerations, including sample size and bias.
- 6. Acquire data analysis skills using statistical methods and software tools like SPSS.
- 7. Master report writing basics, referencing styles, and e-citation tools like Mendeley.
- 8. Recognize ethical research practices, plagiarism avoidance, and using detection software.

Semester III Paper Title - 3.2: INFORMATION SYSTEMS AND SERVICES Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Understand the concept and importance of information services, including planning and design considerations.
- 2. Explore reference services, covering objectives, types, reference process, and the role of technology, with a focus on virtual reference desks and referral services.
- 3. Learn about document delivery services, their significance, types, and the integration of technology, including examples from INFLIBNET and DELNET.
- 4. Discover web-based library services, including virtual library tours, Ask a Librarian, online user education, and evaluation methods for web-based information services.
- 5. Examine bibliographic services, their types, and roles in facilitating information access and use, including the preparation of bibliographies, trend reports, and digests.
- 6. Explore national documentation centers and information systems like NISCAIR, DESIDOC, NASSDOC, ENVIS, and NIMSME (SENDOC).
- 7. Understand international information systems and services such as BIOSIS, INSPEC, ERIC, AGRIS, and INIS, and their significance in global information dissemination.

Semester III Paper Title - 3.3: INDEXING SYSTEM (THEORY) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

Understand indexing's definition, objectives, characteristics, and its role in information retrieval systems.

- 1. Explore indexing components including theories, methods, and indexing languages like thesauri.
- 2. Learn about pre-coordinate and post-coordinate indexing systems such as PRECIS, POPSI, and KWIC.
- 3. Study bibliographic description, its historical development, and standards like ISBD for bibliographic records.
- 4. Discover the concept and importance of bibliographic control, including its role in managing non-book materials.
- 5. Explore international bibliographic control, its need, standards, and the role of international organizations.
- 6. Evaluate indexing systems based on criteria such as recall, precision, coverage, and currency, studying evaluation studies like ASLIB and MEDLARS.

Semester III Paper Title - 3.4: Information and Communication Technology (Theory) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Explore multimedia, hypertext, and hypermedia concepts, including audio, video, and image representation, along with hardware and software requirements.
- 2. Understand database design, development, and management, covering DBMS and RDBMS types, structure, organization, and data security.
- 3. Study WINISIS system overview, installation, database construction, techniques, menus, tools, and database creation.
- 4. Learn about the Internet of Things, its characteristics, applications, and implications for handling big data.
- 5. Explore online databases like SCOPUS, Web of Science, and PUBMED across various disciplines, along with research information management systems like Pure and VIVO.
- 6. Understand cloud computing's concept, characteristics, models, architecture, and its advantages and disadvantages.
- 7. Explore e-publishing concepts, categories, impact metrics like Impact Factor and h-index, and study e-publishing software like MS Publisher and OJS.

Semester III Paper Title - 3.5: Information Sources on Social Sciences and Science and Technology

Student Learning Course Outcomes

- 1. Explore various print sources like dictionaries, encyclopedias, biographical, geographical, statistical sources, directories, and bibliographies, along with abstracting and indexing sources including citation indexes.
- 2. Understand different types of databases including bibliographic databases like INSPEC and Scopus, and full-text databases like JSTOR and ERIC.
- 3. Learn about electronic information sources, their growth, and development, covering e-journals, e-books, e-theses, e-newspapers, blogs, wikis, and online dictionaries.
- 4. Explore electronic and internet resources such as OCLC, UGC-INFONET, DELNET, and CSIR e-journal consortia, along with subject gateways and portals.
- 5. Discover search tools including OPAC, web OPAC, directories, subject gateways, and search engines like Google and Google Scholar, along with meta search engines like Dogpile and MetaCrawler, and develop effective searching strategies.
- 6. Learn guidelines for finding authentic resources on the internet to ensure reliability and credibility.
- 7. Understand intellectual property rights including copyright, patent, plagiarism, fair use, creative commons, trademarks, and tools for checking plagiarism.

Semester III Paper Title - 3.6: Information Processing and Retrieval (Practical - 1) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Follow AACR-II(R) guidelines for cataloguing audio/video recordings and computer-generated files, including web resources.
- 2. Ensure accurate description of non-book materials, including title, statement of responsibility, edition, publication details, and physical description.
- 3. Use appropriate subject headings and classification numbers to facilitate access to the materials.
- 4. Apply prescribed rules for notes and added entries, such as performers, producers, and series statements.
- 5. Include any accompanying material or supplementary content in the cataloguing record.
- 6. Familiarize with the principles and rules of PRECIS indexing system.
- 7. Analyze the content of the documents to be indexed and identify key concepts and terms.
- 8. Create index records using controlled vocabulary and standardized indexing terms.
- 9. Apply PRECIS principles for main entry, coordination, and subordination of index terms.
- 10. Include cross-references and scope notes to enhance the usability of the index.
- 11. Ensure consistency and accuracy in indexing practices to facilitate information retrieval.

Semester III Paper Title - 3.7: Information and Communication Technology (Practical - II) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Understand the MARC21 tags for bibliographic and authority records, including common fields like 245 for title and 100 for author.
- 2. Learn the design and development of databases using WINISIS, covering database creation, structure, data entry, and indexing.
- 3. Explore e-publishing software like MS Publisher and OJS for creating and managing electronic publications, including journals and newsletters.
- 4. Gain proficiency in using SPSS for statistical analysis, including chi-square tests, correlation analysis, t-tests, and ANOVA.
- 5. Develop skills in formulating research objectives, hypotheses, and designing questionnaires for data collection in quantitative research studies.

Semester IV Paper Title- 4.1:Information and Communication Technology (Theory - II) Student Learning Course Outcomes

- 1. Comprehend telecommunication basics, analog vs. digital signals, and various transmission technologies.
- 2. Learn about LAN, MAN, WAN networks, hardware components, topologies, and security measures.

- 3. Familiarize with NICNET, BSNL, ERNET, INFLIBNET, DELNET, CALIBNET, and understand consortia concepts.
- 4. Acquire knowledge of video conferencing, email, e-commerce, and network protocols.
- 5. Explore Internet usage in libraries, resources, and internet-based services.
- 6. Gain insight into cyber laws, DRM, digital signatures, and electronic contracts.
- 7. Understand web evolution, HTML basics, and criteria for effective web design.

Semester IV Paper Title 4.2: Digital Libraries

Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Understand Digital Library fundamentals, collections, services, and initiatives like Shodhganga.
- 2. Learn Digitization tools, techniques, file formats, and Document Management Systems.
- 3. Explore Digital Library Architecture, metadata standards, access control, DRM, and preservation.
- 4. Study features of Digital Library Software like GSDL, DSpace, and E-Prints.
- 5. Explore Content Management Systems, Open Archives Initiative, and Deep Web understanding.
- 6. Understand Data Visualization, tools, techniques, and application in libraries.
- 7. Manage Digital Libraries, handle IPR, Copyright, evaluate trends, and issues.

Semester IV Paper 4.3 (A): Public Library Systems and Services Student Learning Course Outcomes

- 1. Understand the meaning, objectives, functions, and historical development of public libraries in India, including the roles of government and non-government agencies.
- 2. Recognize the need and importance of public library legislation, including examples from the UK, USA, and India, such as the Karnataka State Public Library Act 1965.
- 3. Identify different categories of public library users, their information needs, and the importance of user education and studies.
- 4. Develop policies and procedures for collection development in public libraries, including resource sharing networks and examples from the USA, UK, and India.
- 5. Manage human resources and finances effectively in public libraries, including recruitment, qualification, budget preparation, and performance evaluation.
- 6. Plan and organize various types of information services for different user categories in public libraries, along with library publicity, extension activities, and mobile library services.
- 7. Understand the roles played by national and international associations and organizations such as Raja Ram Mohan Roy Library Foundation, UNESCO, and IFLA in the development and promotion of public libraries.

Semester IV Paper Title 4.3 (b): Academic Library Systems and Services Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Understand the concept, objectives, functions, and characteristics of academic libraries, along with their role in education. Explore the history and development of academic libraries in India.
- 2. Recognize the role of organizations like UGC in academic library development, including their powers, functions, and committees. Understand the influence of the New Education Policy on academic libraries.
- 3. Develop skills in collection development and management, including book selection procedures, preservation, conservation, weeding, and addressing challenges. Explore the advantages of online bookshops and the role of resource sharing networks like INFLIBNET.
- 4. Identify different categories of library users, their information needs, and the importance of user studies, education, and information literacy.
- 5. Plan and provide various library services such as reference services, CAS services, SDI service, indexing and abstracting services, email alerting services, electronic document delivery services, and database services. Learn to design and evaluate library and information services effectively.
- 6. Understand the need, objectives, design, planning, and factors involved in library building construction. Learn about the furniture and equipment required for a functional library.
- 7. Manage human resources and finances in academic libraries, including recruitment, qualifications, training, duties, responsibilities, performance evaluation, and budget preparation. Gain insights into financial sources and mobilization.

Semester IV Paper Title 4.3 (c): Health Science Library Systems and Services Student Learning Course Outcomes

- 1. Understand the concept, objectives, functions, and characteristics of health science libraries, including their growth and development. Identify user categories, their information needs, and the importance of user education and studies.
- 2. Survey basic information sources used in medicine, nursing, allied health, and healthcare administration. Explore traditional and innovative services offered by health science libraries, including databases and electronic resources like ADONIS.
- 3. Develop skills in collection management, including policies, procedures, methods, resource sharing, conservation, preservation, evaluation, and weeding.
- 4. Manage human resources and finances in health science libraries, including recruitment, qualifications, duties, responsibilities, performance evaluation, continuing education programs, and budget preparation and management.

- 5. Design and plan various information services for different categories of users in health science libraries, including doctors, nurses, and patients. Explore national information policies and access to external information.
- 6. Understand the design, planning, factors, furniture, and equipment requirements for health science library buildings.
- 7. Explore the role and functions of organizations like the National Library of Medicine, USA, and international organizations delivering health science information such as WHO, ICMR, and various national institutes.

Semester IV Paper Title 4.4: Project

Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Formulate a scientific question
- 2. Develop the ability to apply the tools and techniques of library and information science in conducting independent research.
- 3. List the objectives and state the hypothesis of the research project
- 4. Outline the library and information science that will be followed to achieve the listed objectives
- 5. Employ the finalized methodology to solve the problem which has been undertaken
- 6. Analyze the data which has been generated by carrying out several research methods
- 7. Create document and report on the research results and conclusions
- 8. Present and explain their research findings to the audience effectively.

Semester IV Paper Title 4.5 : Library Classification (Practical - II) Student Learning Course Outcomes

- 1. Gain understanding of library classification systems, specifically Universal Decimal Classification Scheme principles.
- 2. Apply UDC rules to accurately classify diverse documents into appropriate categories.
- 3. Develop practical skills in navigating classification schedules and assigning class numbers.
- 4. Enhance critical thinking by analyzing document content and determining suitable classifications.
- 5. Learn importance of documentation and record-keeping for efficient library management.
- 6. Build confidence and competence for practical examination assessment through regular practice.

Semester IV Paper Title 4.6: Information and Communication Technology (Practical - II) Student Learning Course Outcomes

After successful completion of this course, students will be able to:

- 1. Gain familiarity with Internet resources, search engines, and search techniques for effective information retrieval.
- 2. Develop skills in web page designing and publishing using Notepad, HTML Editors like Expression Web.
- 3. Acquire proficiency in Content Management Systems (CMS) software such as Drupal, WordPress, Joomla.
- 4. Apply knowledge of ICT tools to create and manage web content efficiently.
- 5. Enhance understanding of web technologies and their practical applications in communication and information dissemination.
- 6. Prepare for practical tasks and assessments related to internet usage, web design, and CMS software

Semester IV Paper Title 4.7: Digital Library (Practical)

Student Learning Course Outcomes

- 1. Develop proficiency in designing and developing digital libraries using D-Space Digital Library Software.
- 2. Gain practical experience in organizing and managing digital collections effectively within the D-Space platform.
- 3. Acquire skills in customizing and configuring D-Space to meet specific institutional or user requirements.
- 4. Understand the principles of digital library architecture and apply them to create user-friendly interfaces and access mechanisms.
- 5. Enhance knowledge of metadata standards and practices for describing and indexing digital library resources.
- 6. Foster collaboration and sharing of digital resources among peers through the implementation of D-Space digital libraries.
- 7. Prepare for practical examinations by maintaining comprehensive records of digital library design and development activities.

Internship

Student Learning Course Outcomes

- 1. Gain practical experience through a one-month internship in a reputed library.
- 2. Apply theoretical knowledge acquired during the course to real-world library settings.
- 3. Develop professional skills in library management, organization, and service provision.
- 4. Acquire hands-on experience in handling library resources, cataloging, and circulation systems.
- 5. Enhance communication and interpersonal skills through interactions with library staff and patrons.
- 6. Learn about current trends and best practices in library and information science.
- 7. Explore career opportunities and potential areas of specialization within the field of librarianship.
- 8. Prepare for future employment or further studies in library and information science.