

ROYAL SCHOOL OF LIBRARY AND INFORMATION SCIENCES (RSLIS)

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

THE ASSAM ROYAL GLOBAL UNIVERSITY, BETKUCHI, GUWAHATI

> SYLLABUS & COURSE STRUCTURE

MASTER OF LIBRARY AND INFORMATION SCIENCE (MLISc)

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PREAMBLE:

The National Education Policy (NEP) 2020 conceives a new vision for India's higher education system. It recognizes that higher education plays an extremely important role in promoting equity, human as well as societal well-being, and in developing India as envisioned in its Constitution. It is desired that higher education will significantly contribute towards sustainable livelihoods and economic development of the nation as India moves towards becoming a knowledge economy and society.

If we focus on the 21st century requirements, the higher education framework of the nation must aim to develop good, thoughtful, well-rounded, and creative individuals and must enable an individual to study one or more specialized areas of interest at a deep level, and also develop character, ethical and Constitutional values, intellectual curiosity, scientific temper, creativity, spirit of service, and twenty-first-century capabilities across a range of disciplines including sciences, social sciences, arts, humanities, languages, as well as professional, technical, and vocational subjects. A quality higher education should be capable enough to enable personal accomplishment and enlightenment, constructive public engagement, and productive contribution to the society. Overall, it should focus on preparing students for more meaningful and satisfying lives and work roles and enable economic independence.

Towards the attainment of holistic and multidisciplinary education, the flexible curricula of the University will include credit-based courses, projects in the areas of community engagement and service, environmental education, and value-based education. As part of holistic education, students will also be provided with opportunities for internships with local industries, businesses, artists, crafts persons, and so on, as well as research internships with faculty and researchers at the University, so that students may actively engage with the practical aspects of their learning and thereby improve their employability.

The undergraduate curriculums are diverse and have varied subjects to be covered to meet the needs of the programs. As per the recommendations from the UGC, introduction of courses related to Indian Knowledge System (IKS) is being incorporated in the curriculum structure which encompasses all of the systematized disciplines of Knowledge which were developed to a high degree of sophistication in India from ancient times and

all of the traditions and practises that the various communities of India—including the tribal communities—have evolved, refined and preserved over generations, like for example Vedic Mathematics, Vedangas, Indian Astronomy, Fine Arts, Metallurgy, etc.

At RGU, we are committed that at the societal level, higher education will enable each student to develop themselves to be an enlightened, socially conscious, knowledgeable, and skilled citizen who can find and implement robust solutions to its own problems. For the students at the University, Higher education is expected to form the basis for knowledge creation and innovation thereby contributing to a more vibrant, socially engaged, cooperative community leading towards a happier, cohesive, cultured, productive, innovative, progressive, and prosperous nation."

ABBREVIATIONS:

1. Cr.	- Credit
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- 2. Major Core Courses of a Discipline
- 3. Minor May/may not be related to Major.
- 4. SEC Skill Enhancement Course
- 5. VAC Value Addition Course
- 6. AECC Ability Enhancement Compulsory Course
- 7. GEC Generic Elective Course
- 8. IKS Indian Knowledge System
- 9. AICTE All India Institute of Technical Education
- 10. CBCS Choice Based Credit System
- 11. HEIs Higher Education Institutes
- 12. MSDE Ministry of Skill Development and Entrepreneurship
- 13. NAC National Apprenticeship Certificate
- 14. NCrF National Credit Framework
- 15. NCVET National Council for Vocational Education and Training
- 16. NEP National Education Policy
- 17. NHEQF National Higher Education Qualification Framework
- 18. NSQF National Skill Qualifications Framework
- 19. NTA National Testing Agency
- 20. SDG Sustainable Development Goals
- 21. UGC University Grants Commission
- 22. VET Vocational Education and Training
- 23. ME-ME Multiple Entry Multiple Exit
- 24. OJT On Job Training
- 25. NCH Notional Credit Hours

INTRODUCTION:

The National Education Policy (NEP) 2020 indicates that higher education plays an extremely important role in promoting human as well as societal well-being in India. As envisioned in the 21st-century requirements, quality higher education must aim to develop good, thoughtful, well-rounded, and creative individuals. According to the new education policy, assessments of educational approaches in undergraduate education will integrate the humanities and arts with Science, Technology, Engineering and Mathematics (STEM) that will lead to positive learning outcomes. This will lead to develop creativity and innovation, critical thinking and higher-order thinking capacities, problem-solving abilities, teamwork, communication skills, more in-depth learning, and mastery of curricula across fields, increases in social and moral awareness, etc., besides general engagement and enjoyment of learning. and more in-depth learning.

The NEP highlights that the following fundamental principles that have a direct bearing on the curricula would guide the education system at large, viz.

- Recognizing, identifying, and fostering the unique capabilities of each student to promote her/his holistic development.
- 2) Flexibility, so that learners can select their learning trajectories and programmes, and thereby choose their own paths in life according to their talents and interests.
- Multidisciplinary and holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world.
- 4) Emphasis on conceptual understanding rather than rote learning, critical thinking to encourage logical decision-making and innovation; ethics and human & constitutional values, and life skills such as communication, teamwork, leadership, and resilience.
- 5) Extensive use of technology in teaching and learning, removing language barriers, increasing access for Divyang students, and educational planning and management.
- 6) Respect for diversity and respect for the local context in all curricula, pedagogy, and policy.
- 7) Equity and inclusion as the cornerstone of all educational decisions to ensure that all students can thrive in the education system and the institutional environment

are responsive to differences to ensure that high-quality education is available for all.

8) Rootedness and pride in India, and its rich, diverse, ancient, and modern culture, languages, knowledge systems, and traditions.

1.2. Credits in Indian Context:

1.2.1. Choice Based Credit System (CBCS) By UGC

Under the CBCS system, the requirement for awarding a degree or diploma or certificate is prescribed in terms of number of credits to be earned by the students. This framework is being implemented in several universities across States in India. The main highlights of CBCS are as below [2]:

- The CBCS provides flexibility in designing curriculum and assigning credits based on the course content and learning hours.
- The CBCS provides for a system wherein students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.
- CBCS also provides opportunity for vertical mobility to students from a bachelor's degree programme to masters and research degree programmes.

The detailed Guidelines for Choice Based Credit System is available at <u>https://ugc.ac.in/pdfnews/8023719 Guidelines-for-CBCS.pdf</u>

1.3. Definitions

1.3.1. Academic Credit:

An academic credit is a unit by which a course is weighted. It is fixed by the number of hours of instructions offered per week. As per the National Credit Framework [2];

1 Credit = 30 NOTIONAL CREDIT HOURS (NCH)

Yearly Learning Hours = 1200 Notional Hours (@40 Credits x 30 NCH)

30 Notional Credit Hours		
Lecture/Tutorial	Practicum	Experiential Learning
1 Credit = 15 -22 Lecture Hours	10-15 Practicum Hours	0-8 Experiential Learning Hours

Note: The Department may consider any such combination by due approval from the Dean of Academics and the Vice-Chancellor before placing to the Board of Studies (BoS) & and Academic Council.

Some Theory-based papers should have 22/23 physical classes to adhere to 30 NCH.

The division of credits should depend upon the Course of Study, and level of the students admitted (slow/fast learners).

1.3.2. Course of Study:

The course of study indicates pursuance of study in a particular discipline/programme. Discipline/Programmes shall offer Major Courses (Core), Minor Courses, Skill Enhancement Courses (SEC), Value Added Courses (VAC), Ability Enhancement Compulsory Courses (AECCs) and Interdisciplinary courses.

1.3.3. Disciplinary Major:

The major would provide the opportunity for a student to pursue in-depth study of a particular subject or discipline. Students may be allowed to change major within the broad discipline at the end of the second semester by giving her/him sufficient time to explore interdisciplinary courses during the first year. Advanced-level disciplinary/interdisciplinary courses, a course in research methodology, and a project/dissertation will be conducted in the seventh semester. The final semester will be devoted to seminar presentation, preparation, and submission of project report/dissertation. The project work/dissertation will be on a topic in the disciplinary programme of study or an interdisciplinary topic.

1.3.4. Disciplinary/interdisciplinary minors:

Students will have the option to choose courses from disciplinary/interdisciplinary minors and skill-based courses. Students who take a sufficient number of courses in a discipline or an interdisciplinary area of study other than the chosen major will qualify for a minor in that discipline or in the chosen interdisciplinary area of study. A student may declare the choice of the minor at the end of the second semester, after exploring various courses.

1.3.5. Courses from Other Disciplines (Interdisciplinary):

All UG students are required to undergo 3 introductory-level courses relating to any of the broad disciplines given below. These courses are intended to broaden the intellectual experience and form part of liberal arts and science education. Students are not allowed to choose or repeat courses already undergone at the higher secondary level (12th class) in the proposed major and minor stream under this category.

i. *Natural and Physical Sciences:* Students can choose basic courses from disciplines such as Natural Science, for example, Biology, Botany, Zoology, Biotechnology, Biochemistry, Chemistry, Physics, Biophysics, Astronomy and Astrophysics, Earth and Environmental Sciences, etc.

ii. *Mathematics, Statistics, and Computer Applications:* Courses under this category will facilitate the students to use and apply tools and techniques in their major and minor disciplines. The course may include training in programming software like Python among others and applications software like STATA, SPSS, Tally, etc. Basic courses under this category will be helpful for science and social science in data analysis and the application of quantitative tools.

iii. Library, Information, and Media Sciences: Courses from this category will help the students to understand the recent developments in information and media science (journalism, mass media, and communication)

iv. Commerce and Management: Courses include business management, accountancy, finance, financial institutions, fintech, etc.,

v. Humanities and Social Sciences: The courses relating to Social Sciences, for example, Anthropology, Communication and Media, Economics, History, Linguistics, Political Science, Psychology, Social Work, Sociology, etc. will enable students to understand the individuals and their social behavior, society, and nation. Students be introduced to survey methodology and available large-scale databases for India. The courses under humanities include, for example, Archaeology, History, Comparative Literature, Arts & Creative expressions, Creative Writing and Literature, language(s), Philosophy, etc., and interdisciplinary courses relating to humanities. The list of Courses can include interdisciplinary subjects such as Cognitive Science, Environmental Science, Gender Studies, Global Environment & Health, International Relations, Political Economy and Development, Sustainable Development, Women's, and Gender Studies, etc. will be useful to understand society.

1.3.6. Ability Enhancement Courses (AEC): Modern Indian Language (MIL) & English language focused on language and communication skills. Students are required to achieve competency in a Modern Indian Language (MIL) and in the

English language with special emphasis on language and communication skills. The courses aim at enabling the students to acquire and demonstrate the core linguistic skills, including critical reading and expository and academic writing skills, that help students articulate their arguments and present their thinking clearly and coherently and recognize the importance of language as a mediator of knowledge and identity. They would also enable students to acquaint themselves with the cultural and intellectual heritage of the chosen MIL and English language, as well as to provide a reflective understanding of the structure and complexity of the language/literature related to both the MIL and English language. The courses will also emphasize the development and enhancement of skills such as communication, and the ability to participate/conduct discussion and debate.

1.3.7. Skill Enhancement Course (SEC): These courses are aimed at imparting practical skills, hands-on training, soft skills, etc., to enhance the employability of students and should be related to Major Discipline. They will aim at providing hands- on training, competencies, proficiency, and skill to students. SEC course will be a basket course to provide skill-based instruction. For example, SEC of English Discipline may include Public Speaking, Translation & Editing and Content writing.

A student shall have the choice to choose from a list, a defined track of courses offered from 1st to 3rd semester.

• Please refer to Annexure II for list of suggestive courses under SEC.

1.3.8. Value-Added Courses (VAC):

i. Understanding India: The course aims at enabling the students to acquire and demonstrate the knowledge and understanding of contemporary India with its historical perspective, the basic framework of the goals and policies of national development, and the constitutional obligations with special emphasis on constitutional values and fundamental rights and duties. The course would also focus on developing an understanding among student-teachers of the Indian knowledge systems, the Indian education system, and the roles and obligations of teachers to the nation in general and to the school/community/society. The course will attempt to deepen knowledge about and understanding of India's freedom struggle and of the values and ideals that it represented to develop an appreciation of the contributions made by people of all sections and regions of the

country, and help learners understand and cherish the values enshrined in the Indian Constitution and to prepare them for their roles and responsibilities as effective citizens of a democratic society.

ii. Environmental science/education: The course seeks to equip students with the ability to apply the acquired knowledge, skills, attitudes, and values required to take appropriate actions for mitigating the effects of environmental degradation, climate change, and pollution, effective waste management, conservation of biological diversity, management of biological resources, forest and wildlife conservation, and sustainable development and living. The course will also deepen the knowledge and understanding of India's environment in its totality, its interactive processes, and its effects on the future quality of people's lives.

iii. *Digital and technological solutions:* Courses in cutting-edge areas that are fast gaining prominences, such as Artificial Intelligence (AI), 3-D machining, big data analysis, machine learning, drone technologies, and Deep learning with important applications to health, environment, and sustainable living that will be woven into undergraduate education for enhancing the employability of theyouth.

iv. Health & Wellness, Yoga education, sports, and fitness: Course components relating to health and wellness seek to promote an optimal state of physical, emotional, intellectual, social, spiritual, and environmental well-being of a person. Sports and fitness activities will be organized outside the regular institutional working hours. Yoga education would focus on preparing the students physically and mentally for the integration of their physical, mental, and spiritual faculties, and equipping them with basic knowledge about one's personality, maintaining self-discipline and self-control, to learn to handle oneself well in all life situations. The focus of sports and fitness including the improvement of various components of physical and skills-related fitness like strength, speed, coordination, endurance, and flexibility; acquisition of sports skills including motor skills as well as basic movement skills relevant to a particular sport; improvement of tactical abilities; and improvement of mental abilities.

These are a common pool of courses offered by different disciplines and aimed towards embedding ethical, cultural and constitutional values; promote critical thinking. Indian knowledge systems; scientific temperament of students. • Please refer to Annexure III for list of suggestive courses under VAC.

1.3.9. Summer Internship / Apprenticeship:

The intention is induction into actual work situations. All students must undergo internships / Apprenticeships in a firm, industry, or organization or Training in labs with faculty and researchers in their own or other HEIs/research institutions during the *summer term*. Students should take up opportunities for internships with local industry, business organizations, health and allied areas, local governments (such as panchayats, municipalities), Parliament or elected representatives, media organizations, artists, crafts persons, and a wide variety of organizations so that students may actively engage with the practical side of their learning and, as a by-product, further improve their employability. Students who wish to exit after the first two semesters will undergo a 4-credit work-based learning/internship during the summer term to get a UG Certificate.

1.3.9.1. *Community engagement and service:* The curricular component of 'community engagement and service' seeks to expose students to the socioeconomic issues in society so that the theoretical learnings can be supplemented by actual life experiences to generate solutions to real-life problems. This can be part of summer term activity or part of a major or minor course depending upon the major discipline.

1.3.9.2. *Field-based learning/minor project:* The field-based learning/minor project will attempt to provide opportunities for students to understand the different socioeconomic contexts. It will aim at giving students exposure to development-related issues in rural and urban settings. It will provide opportunities for students to observe situations in rural and urban contexts, and to observe and study actual field situations regarding issues related to socioeconomic development. Students will be given opportunities to gain a first- hand understanding of the policies, regulations, organizational structures, processes, and programmes that guide the development process. They would have the opportunity to gain an understanding of the complex socioeconomic problems in the community, and innovative practices required to generate solutions to the identified problems. This may be a summer term project or part of a major or minor course depending on the subject of study.

1.3.10. Indian Knowledge System:

In view of the importance accorded in the NEP 2020 to rooting our curricula and pedagogy in the Indian context all the students who are enrolled in the four-year UG programmes should be encouraged to take an adequate number of courses in IKS so that the **total credits of the courses taken in IKS amount to at least five percent of the total mandated credits** (*i.e. min. 8 credits for a 4 yr. UGP & 6 credits for a 3 yr. UGP*). The students may be encouraged to take these courses, preferably *during the first four semesters of the UG programme*. At least half of these mandated credits should be in courses in disciplines which are part of IKS and are related to the major field of specialization that the student is pursuing in the UG programme. They will be included as a part of the total mandated credits in IKS can be included as a part of the mandated Multidisciplinary courses that are to be taken by every student. All the students should take a Foundational Course in Indian Knowledge System, which is designed to present an overall introduction to all the streams of IKS relevant to the UG programme. The foundational IKS course should be broad-based and cover introductory material on all aspects.

Wherever possible, the students may be encouraged to choose a suitable topic related to IKS for their project work in the $7/8^{\text{th}}$ semesters of the UG programme. [5]

(Note: Refer "Guidelines for Incorporating Indian Knowledge in Higher Education Curricula", University Grants Commission, March 2023 for further details)

1.3.11. Experiential Learning:

One of the most unique, practical & beneficial features of the National Credit Framework is assignment of credits/credit points/ weightage to the experiential learning including relevant experience and professional levels acquired/ proficiency/ professional levels of a learner/student. Experiential learning is of two types:

a. *Experiential learning as part of the curricular structure* of academic or vocational program. E.g., projects/OJT/internship/industrial attachments etc. This could be either within the Program- internship/ summer project undertaken relevant to the program being studied or as a part time employment (not relevant to the program being studied or as a part time employment (not relevant to the program being studied- up to certain NSQF level only). In case where experiential learning is a part of the curricular structure the credits would be calculated and assigned as per basic principles of NCrF i.e., 40 credits for 1200 hours of notional learning.

b. *Experiential learning as active employment* (both wage and self) post completion of an academic or vocational program. This means that the experience attained by a person after undergoing a particular educational program shall be considered for assignment of credits. This could be either Full or Part time employment after undertaking an academic/ Vocation program.

In case where experiential learning is as a part of employment the learner would earn credits as weightage. The maximum credit points earned in this case shall be double of the credit points earned with respect to the qualification/ course completed. The credit earned and assigned by virtue of relevant experience would enable learners to progress in their career through the work hours put in during a job/employment.

2. GRADUATE ATTRIBUTES:

The 10 Graduate Attributes are as follows:

SL. NO.	GRADUATE ATTRIBUTES	DESCRIPTION
GA - 1	Disciplinary knowledge	To demonstrate technological proficiency in the library by utilizing the knowledge and skills required for a satisfactory Practical approach.
GA – 2	Complex Problem solving	To acquire problem solving and initiative skills that contribute to productive and satisfactory outcomes.
GA - 3	Analytical & Critical Thinking	To develop and update knowledge required in dealing with various Libraries.
GA - 4	Creativity	To apply the skills and tools in the form of advanced and up to date of library catalogue and classification.
GA - 5	Communication Skills	Effective communication skills to interact with diverse user groups, stakeholders, and colleagues, as well as the ability to advocate for the value of library and information services.
GA - 6	Research-Related Skills	To able to define research problem, formulate hypothesis, manage resources, analyze and interpret data, explore cause – effect relationships, plan and execute a report, present results of the experiment and

		demonstrate a sense of scientific enquiry, reflective thinking, self- directed learning and creativity
GA - 7	Collaboration	To ability to collaborate with colleagues, interdisciplinary teams, and community partners to enhance the quality and reach of library and information services.
GA - 8	Leadership Readiness/ Qualities	To develop of Knowledge on strategic planning, budgeting, and policy making inside the library.
GA - 9	Digital Technological Skills	To utilize the current and emerging technologies relevant to library and information services, including library management systems, digital libraries, and information retrieval tools.
GA - 10	Environment Awareness and Action	To develop the techniques of effective waste management inside the library and understanding of archival principles and preservation techniques to ensure the longevity and accessibility of historical and cultural materials.

3. PROGRAMME LEARNING OUTCOME OF MLISC:

Students post graduating with the degree MLISC (Library and Information Science) will be able to achieve the following:

P.O.	HEADER	DESCRIPTION
PO - 1	Disciplinary knowledge	Demonstrate knowledge and expertise in cataloging and classifying information resources using standard systems and tools
PO - 2	Complex Problem solving	Develop and analyze the gaps and strengths in library collections, and strategically develop collections to meet the evolving needs of users in a variety of contexts.
PO - 3	Analytical & Critical Thinking	Develop critically evaluate information sources, distinguishing between reliable and unreliable information, and assessing the relevance and credibility of resources.
PO - 4	Creativity	Acquire Creativity skills in the selection, acquisition, organization, and management of information

		1
		resources to meet the needs of diverse user communities.
PO - 5	Communication Skills	Demonstrate effective oral and written communication skills for interacting with diverse stakeholders, including colleagues, users, and other professionals.
PO - 6	Research -Related Skills	Develop the ability to conduct independent and systematic research in library and information science, including the use of research methods and techniques.
PO - 7	Collaboration	Demonstrate effective oral and written communication skills for interacting with diverse stakeholders, including colleagues, users, and other professionals.
PO - 8	Leadership Readiness/ Qualities	Develop leadership and management skills necessary for roles in library administration, including strategic planning, budgeting, and personnel management.
PO - 9	Digital Technological Skills	Demonstrate proficiency in utilizing current and emerging technologies relevant to the field of library and information science.
PO - 10	Environment Awareness and Action	Possess the skills to assess and minimize the environmental impact of library activities, such as assessing the carbon footprint of information systems and services.

4. PROGRAMME SPECIFIC OUTCOME:

Upon completion of this course, the student should be able to:

PSO	DESCRIPTION
	Know and demonstrate understanding of the concepts of Library
P30 - 1	and Information Science and other.
PSO – 2	Capable of analyzing various situations and use proper technique applicable according to the need of the Users and utilizing emerging technologies to enhance access and retrieval
	of information in digital environments.
PSO – 3	Develop the knowledge, skills and technology necessary for build service-oriented library (Academic, Public, and Special) and capable of conducting original research in the field of library and information science and contribute to the advancement of knowledge in the discipline.

	Showcase expertise in leveraging technology for innovative
PSO - 4	solutions and contribute to sustainable and inclusive library
	practices, fostering lifelong learning in diverse communities.

5. TEACHING AND LEARNING METHODOLOGY

Teaching and Learning Methodology for a Master's in Library and Information Science (MLIS) program is designed to equip students with the knowledge and skills necessary to excel in the field of library and information science. This methodology emphasizes a combination of theoretical understanding and practical application, ensuring that students are well-prepared for the demands of the profession. Here's an overview of the key elements of this methodology:

5.1. Curriculum Design:

Core Courses: The program should include core courses covering the fundamental principles of library and information science, including information organization, information retrieval, reference services, and library management.

Elective Courses: Offer a wide range of elective courses, allowing students to tailor their education to their specific interests, such as digital librarianship, archives management, or information technology.

Experience Learning: Incorporate internships or practicum experiences to provide hands-on training in real library and information science settings.

5.2. Active Learning:

Group Projects: Encourage collaborative group projects to develop teamwork and problem-solving skills, reflecting the collaborative nature of the profession.

Case Studies: Use real-world case studies to help students apply theoretical knowledge to practical situations.

Field Visits: Organize field visits to libraries, archives, and information centers to expose students to different types of library environments.

5.3. Technological Proficiency:

Information Technology Training: Integrate training on the latest information management and library technology, including library management systems, digital repositories, and data analytics.

Online Resources: Utilize online databases, digital collections, and e-resources to simulate the online research and information retrieval process.

5.4. Research Skills:

Research Methods: Teach research methodologies and techniques relevant to library and information science, preparing students for advanced research and thesis/dissertation projects.

Information Literacy: Promote information literacy skills, enabling students to educate library patrons effectively.

Guest Lectures and Industry Experts: Invite guest lecturers from the field to provide real-world insights, share their experiences, and discuss emerging trends and challenges.

Professional Development: Encourage participation in professional organizations, conferences, and workshops.

Thesis Project: Include a capstone project or thesis requirement that allows students to delve deeply into a specific area of library and information science and provide mentorship and guidance throughout the research and writing process.

Mentorship and Advising: Assign students to faculty advisors or mentors who can provide guidance and support throughout their academic journey.

Feedback Mechanisms: Regularly seek feedback from students to assess the effectiveness of the teaching and learning process and make necessary improvements.

By following this comprehensive teaching and learning methodology, a Master's in Library and Information Science program can ensure that graduates are well-equipped to meet the challenges of the dynamic and evolving field and make a meaningful impact in their roles as information professionals.

6. ASSESSMENT METHODS:

Methods	Weightage
Continuous Evaluation	30%
Semester End Examination	70%
Total	100%

The Continuous Evaluation component is again re-divided as per the following connotation:

- Class Participation (15%)
- Mid-Term Examination (10%)
- Attendance (5%)

Class Participation (15%): Every student's progress and performance are continuously adjudged throughout the semester in different ways such as Class Tests, Viva, Assignments, Project Work, and Seminars etc. 15% marks are allotted under the head 'Class Participation'.

Mid-Term Examination (10%): This is a written test conducted in the middle of the semester after completion of 30% to 40% of the course. 10% marks are allotted for Mid-Term Examination.

Attendance (5%): Ideally, a student is expected to attend 100% of the classes, but considering various hindrances like illness, accident, etc. a relaxation of maximum 25% is given, which means a student has to maintain an attendance of minimum 75% in each course; failing to do so will lead to debarment of the student from the examination in the said course. 1-5 marks are given to students having more than 75% attendance. Attendance is awarded to a student as per the following connotation:

Percentage of Attendance (%)	Marks
More than 95%	5
More than 90% and up to 95%	4
More than 85% and up to 90%	3

More than 80% and up to 85%	2
More than 75% and up to 80%	1
Up to 75%	0

7. EVALUATION SCHEME 2023-24

	Component of Evaluation	Marks	Frequency	Code	Weightage (%)	
Α	Continuous Evaluation					
I.	Analysis/Class test		1-3	С		
II.	Home Assignment		1-3	Н		
III.	Project	Combination of any three from (i) to (v)	1	Р		
IV.	Seminar	with 5 marks each	1-2	S		
V.	Viva- Voce/Presentation		1-2	V	25%	
VI.	MSE	MSE shall be of 10 marks	1-3	Q/CT		
VII.	Attendance	Attendance shall be of 5 marks	100%	А	5%	
В	Semester End Examination		1	SEE	70%	
	Project/ Dissertation					

MASTER OF LIBRARY AND INFORMATION SCIENCE PROGRAMME STRUCTURE Course / Programme: MASTER OF LIBRARY AND INFORMATION SCIENCE

	1 st SEMESTER								
Sl No	Subject Code	Name of the Subject	L	Т	Р	С	ТСР		
	·	Core Subjects	•						
1	LIB224C101	Foundation of Library and Information Science (Theory)	3	1	0	4	4		
2	LIB224C102	Organization of Knowledge Classification and Cataloging (Theory)	3	1	0	4	4		
3	LIB224C113	Organization of Knowledge Classification and Cataloging (Practical)	0	0	8	4	8		
4	LIB224C104	Information Source and Services (Theory)	3	1	0	4	4		
		Discipline-Specific Elective (anyon	e)						
1	LIB224D101	Foundation of Computer & Information Technology (Theory)	3	1	0	4	4		
2	LIB224D102	Community Information Service (Theory)	3	1	0	4	4		
	Ability Enhancement Compulsory Courses (AECC)								
1	CEN984A101	Communicative English – I	1	0	0	1	1		
2	BHS984A103	Behavioural Science - I	1	0	0	1	1		
	•	Ability Enhancement Elective Courses	(AEEC)					
1		Not Applicable							
		Total	14	4	8	22	26		

2 ND SEMESTER									
Sl No	Subject Code	Name of the Subject	L	Т	Р	С	ТСР		
	Core Subjects								
1	LIB224C201	Management of Library and Information Centre (Theory)	3	1	0	4	4		
2	LIB224C202	Library Automation and Software Package (Theory)	3	1	0	4	4		
3	LIB224C213	Library Automation and Software Package (Practical)	0	0	8	4	8		
4	LIB224C204	Library System Analysis and Design (Theory)	3	1	0	4	4		
		Discipline-Specific Elective (anyon	ie)						
1	LIB224D201	Collection Development and Reference Management (Theory+ Practical)	2	0	2	4	4		
2	LIB224D202	Information Communication Technology (Theory)	3	1	0	4	4		
	A	bility Enhancement Compulsory Course	es (AE	CC)					
1	CEN984A201	Communicative English – I	1	0	0	1	1		
2	BHS984A203	Behavioural Science - I	1	0	0	1	1		
Ability Enhancement Elective Courses (AEEC)									
1		Students will opt one AEEC from a given basket of course like ILD, French, Sericulture, Floriculture etc.	2	0	0	2	2		
		Total	15	3	10	24	28		

3 RD SEMESTER							
Sl No	Subject Code	Name of the Subject	L	Т	Р	С	ТСР
		Core Subjects					
1	LIB224C301	Information Retrieval (Theory)	3	1	0	4	4
2	LIB224C302	Digital Library Software Packages (Theory)	3	1	0	4	4
		Discipline Specific Elective (any thre	e)				
1	LIB224D311	Digital Library Software Packages (Practical)	0	0	8	4	8
2	LIB224D302	Preservation and Conservation of Materials (Theory)	3	1	0	4	4
3	LIB224D303	Database Management System (Theory)	3	1	0	4	4
4	LIB224D304	Application of Internet (Theory)	3	1	0	4	4
	A	bility Enhancement Compulsory Courses	(AEC	C)			
1	CEN984A301	Communicative English III	1	0	0	1	1
		Ability Enhancement Elective Courses (A	AEEC)				
1		Students will opt one AEEC from a given basket of course like ILD, French, Sericulture, Floriculture etc.	2	0	0	2	2
		Project/Dissertation					
1	LIB224C321	Library Housekeeping Operations (Practical)	0	0	8	4	8
		Total	15	4	16	27	35

4 TH SEMESTER								
Sl No	Subject Code	Name of the Subject	L	Т	Р	С	ТСР	
	Core Subjects							
1	LIB224C401	E-Learning and Content Management System (Theory + Practical)	2	0	2	4	4	
2	LIB224C402	Digital Resource Management (Theory)	3	1	0	4	4	
	Discipline Specific Elective (any three)							
1	LIB224D411	Digital Resource Management (Practical)	0	0	8	4	8	
2	LIB224D402	Research Methodology (Theory)	3	1	0	4	4	
3	LIB224D403	Media Information Literacy & Copyright (Theory)	3	1	0	4	4	
4	LIB224D404	Marketing of Library and Information Services (Theory)	3	1	0	4	4	
	A	bility Enhancement Compulsory Courses	(AECO	C)				
1	CEN984A401	Communicative English III	1	0	0	1	1	
		Ability Enhancement Elective Courses (A	EEC)					
1		Not Applicable						
Project/Dissertation								
1	LIB224C421	Dissertation	0	0	14	8	14	
		Total	12	3	24	29	39	
	(GRAND TOTAL CREDITS	56	14	58	102	128	

MLISC FIRST SEMESTER

Papar Coro	FOUNDATION OF LIBRARY AND INFORMATION SCIENCE	Subject
	(Theory)	Code
1-1	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224C101

The objective of the course is to introduce the students with basic philosophy of Library and Information Science.

COURSE OUTCOME:

E.

On Successful completion of the course the students will be able to					
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL			
C01	Know the contribution of Dr. S.R. Ranganathan in the field of LIS and get acquainted with the Five Laws of Library Science.	BT Level I			
C02	Demonstrate the role of libraries and its importance in the human civilization and able to understand the history of libraries, their development, and their current role in society.	BT Level II			
CO3	Compare between Public, Academic and Special Libraries and its functions and able to identify the different types of libraries and their unique functions.	BT Level II			
CO4	Make acquainted with the roles and responsibilities of professional associations in LIS profession.	BT Level III			
CO5	Evaluate various information sources within different contexts, such as academic, corporate, public, and specialized libraries.	BT Level IV			
C06	Discuss the global perspectives shaping the field of library and information science, demonstrating awareness of emerging trends, innovations, and best practices to adapt to the evolving information landscape.	BT Level VI			

DETAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
Unit 1	Library -Concepts, Definition and Functions; Library as a social institution: Library's role- In Information exchange, Recreation and in Community Information-Factors affecting library development: Information Industry -Generators, Providers and Intermediaries; Dr. S.R. Ranganathan: An Introduction; Contribution of Dr. S.R. Ranganathan in Library Science; Five Laws of Library and Information Science and their implications	15
Unit 2	Types of Library: Objectives, Features and Functions; Public Library; Academic Library; Special Library; Historical Development of Library in the World; Library Movement in India: With special reference North East India; Librarianship: Professional Ethics; Librarianship as a Profession; Library Legislation in India with Special Reference to North East India; Library Extension Services: Concept and forms; Community	15

	Information Services: Concept and Forms; Intellectual Property Rights (IPR)- Concept and Types.	
Unit 3	Library Association: Meaning, Objectives and Functions, Types ; ALA (American Library Association); ILA (Indian Library Association); IASLIC (Indian Association of Special Library); IATLIS (Indian Association of Teachers of Library and Information Science); LA (Library Association), UK; IFLA International Federation of Library Associations); CILIP (Chartered Institute of Library and Information Professionals)	15
Unit 4	UNESCO (United Nations Educational, Scientific and Cultural Organization) -Objectives, activities and services; UNESCO and Public Library Manifesto; RRRLF (Raja Ram Mohan Roy Library Foundation- Objectives, Functions; Public Libraries of India with Special reference to: Asiatic Public Library, Khuda Bakash Oriental Library, Baroda Public Library System, Connemara Public Library, Delhi Public Library;	15
	TOTAL PERIODS	60

TEXTBOOKS:

- 1. R.S. Prajapati (2013). Foundations of Library and Information Science, Discovery Publishing House, New Delhi.
- 2. Bauer, Patricia. (2020). Foundations of library and information science. New York, Neal-Schuman

REFERENCE BOOKS:

- 1. Agarwal, U. K. (1999). Twentieth century: Library legislation in India, Udaipur, Shiva Publishers.
- 2. Carlson, Christ, & Brosnahan, Ellen. (2008). Guiding students into information literacy: Strategies for teachers and teacher-librarians.USA, Scarecrow Press
- 3. Crawford, Walt. (1998). Being analog: Creating tomorrow's libraries, Chicago, American Library Association
- 4. Ismail, Abdullah. (2009). Global library and information science: A text book for students and educators with contributions from Africa, Asia, Australia, New Zealand, Europe, Latin America and the Caribbean, the Middle East and North America, New York, Walter de Gruyter
- 5. Kesselman, Martin. Alan, & Weintraub, Irwin (Eds.) (2010). Global librarianship, New York, Marcel Dekker Inc.
- 6. Leckie, Gloria J, Given, Lisa M, & Buschman, John E (2010). Critical theory for library and information science, California, Libraries Unlimited
- 7. Maskus, Keith. E. & Bergsten, C. F. (2000). Intellectual property rights in the global economy, Washington DC, Institute for International Economics
- 8. Panella, Deborah, & Mount, Ellis (2012). Basics of law librarianship, New York, Routledge
- 9. Ramage, Magnus, & Chapman, David. (Eds.). (2011). Perspectives on information, New York, Routledge Chapman & Hall

Paper	ORGANIZATION OF KNOWLEDGE CLASSIFICATION AND CATALOGING	Subject
Core	(Theory)	Code
1-2	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224C102

The objective of the course is to give hands on knowledge and skills in Library classification and cataloguing.

COURSE OUTCOME:

On Successful completion of the course the students will be able to					
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL			
C01	Define the basics of library classification and practical implication of the major classification schemes.	BT Level I			
C02	Demonstrate a comprehensive understanding of cataloguing principles and standards, including bibliographic description, subject analysis, classification, and authority control.	BT Level II			
CO3	Identify the fundamentals of classification schemes in organizing knowledge resources.	BT Level III			
CO4	Classify the fundamental skills of Library cataloguing system.	BT Level IV			
C05	Explain ethical considerations and legal frameworks in cataloging and classification practices, ensuring adherence to professional and legal standards in information organization.	BT Level V			
C06	Discuss on current developments, trends, and best practices in organization of knowledge, classification, and cataloging, contributing to the advancement of the field.	BT Level VI			

DETAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
Unit 1	Library Classification: Origin, Meaning, Need and Purpose; History of	
	Classification; Universe of Knowledge: Structures and attributes; Modes	15
	of formation of subjects	
Unit 2	Normative Principles of Classification: General Theory; APUPA; Types	
	and Features of Classification Schemes; Brief study of classification	15
	schemes- DDC (Dewey Decimal Classification), UDC (Universal Decimal	
	Classification), LCC (Library of Congress Classification), CC (Colon	

	Classification), Universe of subjects as mapped in major classification schemes	
Unit 3	Library Catalogues: Fundamental Concepts; Historical Developments Definition and Objectives; Purposes and Functions; Trends in Library Cataloguing; Centralized and Cooperative Cataloguing Bibliographic Standards: ISBD (International Standard Bibliographic Description), MARC (Machine Readable Catalogue), CCF (Common communication Format), ISBN (International Standard Book Number), ISSN (International Standard Serial Number)	15
Unit 4	Idea plane: canons, principles and postulates; fundamental categories. Verbal plane: canons and principles; Notation: Definition, Structures, Quality and Function, Trends of Library Classification; Organizations, Subject heading: Meaning, Objectives and Functions SLSH (Sears List of Subject Heading), LCSH (Library of Congress Subject Heading); chain indexing. Structure of Anglo-American Cataloguing Rules II and Classified Cataloguing Code.	15
	TOTAL PERIODS	60

CODES/ STANDARDS:

- i. American Cataloging Rules (most recent edition to be used)
- ii. Ranganathan, S.R. Classified Catalogue Code, etc. 5th. ed. Bangalore: SRELS,1964
- iii. MARC21andrelatedstandardsforbibliographicrecords
- iv. Dublin Core and other relevant metadata standards for different kinds of objects /resources
- v. Library of Congress Subject Headings
- vi. Sears List of Subject Headings

TEXTBOOKS:

- 1. Krishan Kumar (2023). Theory of cataloguing. New Delhi: Vikas Publication.
- 2. Krishan Kumar (2023). Theory of classification. New Delhi: Vikas Publication.

REFERENCE BOOKS:

- 1. Carter, R.C. ed. (2001). Managing cataloguing and the organization of information: philosophies and challenges at the onset of the 21st century. New York: Haworth Press.
- 2. Cole, Jim and Jones, Wayne ed. (2002). E-serials cataloguing. New York: Haworth Press.
- 3. Dhiman, A.K. & Yashoda Rani. (2005). Learn library classification. New Delhi: Ess Ess.
- 4. Kao, Mary L. (2001). Cataloguing and classification for library technicians (2nd Ed.). New York: Haworth Press.
- 5. Kao, Mary L. (2003). Cataloguing and classification for library personnel. Mumbai: Jaico.

Paper Core 1-3	ORGANIZATION OF KNOWLEDGE CLASSIFICATION AND CATALOGING	Subject
	(Practical)	Code
	L-T-P-C: 0-0-8-4 Credit point: 4 Scheme of Evaluation: (P)	LIB224C113

The objective of the course is to give practical knowledge and skills in Library classification using DDC, UDC and Colon classification.

COURSE OUTCOME:

On Successful completion of the course the students will be able to			
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL	
C01	Demonstrate a comprehensive understanding of the historical development, principles, and structure of the Dewey Decimal Classification (DDC) system	BT Level II	
CO2	Demonstrate an in-depth understanding of the historical development, principles, and theoretical foundations of Colon Classification (CC), including its structure and hierarchical organization.	BT Level II	
CO3	Develop skills in subject analysis and proficiency in using standard schemes of classification and subject	BT Level III	
CO4	Apply DDC principles effectively to classify a wide array of knowledge domains and information resources, demonstrating proficiency in assigning appropriate classification numbers and hierarchy.	BT Level IV	
C05	Apply practical knowledge, and case studies allowing students to solve classification and catalogue challenges.	BT Level IV	
C06	Design catalogue methods, including descriptive catalogue, subject catalogue, and authority control for maintaining consistency and accuracy in information access.	BT Level VI	

In the course, total marks will consist as under:

(1) Practical (70 marks) and (2) Viva Voce (30 marks)

DETAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENTS	PERIODS	
Unit 1	Classification of Documents representing basic, Compound and	15	
	Complex Subject according to CC (Colon Classification);	15	
Unit 2	Classification of Documents requiring common subdivisions and		
	other auxiliaries; Classification of documents basic, compound and	1 5	
	complex subjects according to DDC (Dewey Decimal	15	
	Classification 23 rd edition)		

Unit 3	Cataloguing of works of personal authors: Shared Responsibility,	
	Mixed Responsibility, Anonymous works, corporate works, Serial	15
	publications, Non-Book Materials, Internet and Multimedia Resources;	15
	According to AACR-2 (Anglo American Cataloguing Rules)	
	Assigning subject heading Using; SLSH (Sears List of Subject Heading)	
Unit 4	(Latest Edition) and Library of Congress Subject Heading; Anonymous	15
	works; Works of corporate authorship and Analytical.	
TOTAL PERIODS		60

TEXTBOOK:

- 1. Melvil Dewey, Joan S. Mitchell, Julianne Beall, Rebecca Green, Giles Martin(2023). Dewey Decimal Classification and Relative Index. OCLC; 23rd edition.
- 2. S. R. Ranganathan (2023). Colon Classification Sixth Edition The Basic Classification. Sikhar Publishing House.

REFERENCE BOOKS:

- 1. Dhyani, Pushpa. (2006). Classifying with Dewey decimal classification. New Delhi: Ess Ess.
- 2. Kaula, P.N. (1985). A treatise on colon classification. New Delhi: Sterling Publishers.
- 3. Khan, M.T.M. (2005). Dewey decimal classification. New Delhi: Shree Publishers.
- 4. Krishan Kumar (1986). An introduction to cataloguing practice. (3rd Rev. ed.). New Delhi: Vikas Publishing.
- 5. Mary, Mortimer. (2007). Learn Dewey decimal classification (Ed. 22). Friendswood, US: Total Recall Publications.
- 6. Satija, M.P. (1995). Manual for practical colon classification. (Rev. ed. 3). New Delhi: Sterling Publishers.
- 7. Satija, M.P. (2004). Exercises in the 22nd ed. Of Dewey decimal classification. New Delhi: Ess Ess.
- 8. Singh, S.N. & Prasad, H.N. (1985). Cataloguing manual AACR-II. Delhi: B.R. Publishing.

Paper Core	INFORMATION SOURCES AND SERVICES	Subject
	(Theory)	Code
1-1	L-T-P-C : 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224C104

The objective of the course is to acquire knowledge on reference and information sources and services in context of libraries.

COURSE OUTCOME:

On Successful completion of the course the students will be able to			
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL	
C01	Define planning, managing, and evaluating information services in different settings, including libraries, information centers, and online platforms.	BT Level I	
CO2	Demonstrate the principles and practices of reference services, including techniques for reference interviews, reference tools, and methods for providing accurate and timely information assistance to users.	BT Level II	
CO3	Develop abilities to teach information literacy skills to users, including effective search strategies, source evaluation, citation practices, and ethical use of information.	BT Level III	
CO4	Classify the significance of information literacy, educating users on information seeking, evaluation, and ethical use of information resources to empower them in their academic or professional endeavours.	BT Level IV	
C05	Examine specialized information services and understanding their unique characteristics and retrieval methods.	BT Level IV	
C06	Engage in continuous learning and innovation, staying abreast of new developments and best practices in SDI, and contributing to the enhancement of SDI strategies and services	BT Level IV	

DETAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENTS	
Unit 1	Sources of Information: Introduction, Primary Information Sources: Periodicals, Conferences, Patents, Standards, Theses/Dissertations,	15

	Trade Literature, etc.; Secondary Information Sources: Dictionaries, Encyclopaedias, Biographical, Geographical, Bibliographies, Indexing and Abstracting, Newspaper Indexes and Digests, Statistics, Handbooks and Manuals; Tertiary Information Sources: Directories, Yearbooks, Almanacs, Bibliography of Bibliographies, Union Catalogues; Criteria for evaluation of Reference and Information Sources	
Unit 2	Reference Service – Concepts; Scope; Modes; Enquiry Techniques; Information Searching Techniques from Print and Electronic Sources Referral Services; Document Delivery Services; Translation Services – Concepts; Scope and Usefulness Qualifications, Qualities, Duties and Role of Reference Staff	15
Unit 3	Information Needs and Information Seeking Behaviour of Users – History; Concepts and Characteristics; Models of Information Seeking Behaviour – Models by Wilson; Dervin; Kulhthau and Ellis; Information Sources and Services in the Humanities; Social Sciences; Sciences; Business and Law;	15
Unit 4	User Studies – History; Concepts; Goals; Objectives; Methodology and Case Studies User Education – Concepts; Goals; Objectives; Role and Techniques; Documentation Services: Abstracting and Indexing Services; Alerting Services; CAS (Current Awareness Service), SDI, Reprographic Service, Translation Service, Document Delivery, Bulletin Board Service and Referral Service; Digital reference service	15
	Total Periods	60

CORE READING:

- 1. Connor, E. (Ed.).(2006) An introduction to reference services in academic libraries. New York: Haworth Information Press.
- 2. Katz, b. (Ed.). (2003). Digital reference services. Binghamton, NY: Haworth Information Press.

ADDITIONAL READING:

- 1. Case, D.O. (2002). Looking for Information: A survey of research on information seeking, needs and behaviour. California: Academic Press.
- 2. Choo, C. W. et al. (2000). Web Work: Information seeking and knowledge work on the world wide web. Massachusetts: Kluwer Academic Publications.
- 3. Chowdhury, G. G. (2011). Information users and usability in the digital age. New York: Neal-Schuman Publishers, Inc.
- 4. Dalston, T. , & Columbus, M.P. (Eds.). (2008). Virtual reference on a budget : Case studies.Ohio: Linworth Pub.
- 5. Ford, C. (2008). Crash course in reference. Westport, Conn.: Libraries Unlimited. Hillard, J. M. (2000). Where to find what: A handbook to reference service, (4th ed.). Lanham, Md.: Scarecrow Press.
- 6. Kern, M. K. (2009). Virtual reference best practices : Tailoring services to your library Chicago: American Library Association.

Paper DSE 1-1	FOUNDATION OF COMPUTER & INFORMATION TECHNOLOGY	Subject
	(Theory)	Code
	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D101

The objective of the course is to give the knowledge on library automation and Networking. **COURSE OUTCOME:**

On Successful completion of the course the students will be able to			
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL	
C01	Define the basic components of a computer system, including hardware components (CPU, memory, storage devices), software (operating systems, applications), and their functionalities.	BT Level I	
CO2	Compare of operating system functionalities, such as process management, memory management, file systems, and user interfaces, and how they facilitate communication between hardware and software.	BT Level II	
CO3	Identify the fundamental concepts of computer networks, including types of networks, network topologies, protocols, and the Internet, along with the ability to comprehend how data is transferred across networks.	BT Level III	
CO4	Identify the comprehensive understanding of various transmission media, including guided (wired) and unguided (wireless) channels.	BT Level III	
C05	Develop a comprehensive understanding of how search engines work, including the process of crawling, indexing, and ranking web pages.	BT Level III	
C06	Examine the user experience aspects of search engines, including the design of search interfaces and the presentation of search results.	BT Level IV	

DETAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
Unit 1	Computer Applications: introduction, development, and generations; Information Technology: introduction and scope; development; Computer generations Computer Components: Hardware and Software, Input and Output Devices; Storage devices; Number system: Binary number system, Binary codes, ASCII and Unicode; data types	15
Unit 2	Operating System: concept, types and functions: DOS, LINUX, and Windows File formats: types, nature and characteristics Office	15

	Packages: Word Processor, Spreadsheet, Presentation Tools, Ms- Access Practical: Operating System, Word Processor, Spreadsheet, Presentation Tools, Ms-Access	
Unit 3	Telecommunication: Transmission Channels, Mode and Media; Multiplexing, Modulation, Standards and Protocols-ISDN, PSDN; Wireless Communication: Media, Wi-Fi, Li-fi Satellite Communication, Mobile Communication;	15
Unit 4	Fundamentals of Internet: Introduction, History, OSI Model; Network: Types of Networks, Topology; WWW (World Wide Web): Introduction, History, Recent Developments; Search Engine, Meta Search Engine: Introduction, Functions Semantic Web	15
TOTAL PERIODS		60

TEXTBOOKS:

- 1. Sinha, P.K (2004) Computer Fundamentals. 6th Ed. BPB Publications: New Delhi.
- 2. Ram, B (2007). Computer Fundamenals: Archgitecture and Organization. 4th Ed. New Age International Publishers: New Delhi.

REFERENCE BOOKS:

- 1. Rajaraman, V Fundamentals of Computers. 5th Ed. Prentice Hall India: New Delhi, 2010
- 2. Arvind Kumr. Ed. Information Technology for All (2Vols) New Delhi, Anmol, 2006
- 3. Bnsal, S.K. Information Technology and Globalization, New Delhi: A.P.H. Publishing Corporation, 2005
- 4. Basandra, S.K.: Computers Today and Globalization, New Delhi, Golgotia, 2002.

Paper DSE 1-2	COMMUNITY INFORMATION SERVICE	Subject
	(Theory)	Code
	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D102

The objective of the course is to acquire knowledge on Community Information Service.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Learn about community information center for providing community services.	BT Level I
CO2	Illustrate and understanding of the user community information and services.	BT Level II
CO3	Explore methods for acquiring, organizing, and managing information resources.	BT Level II
CO4	Apply the knowledge acquired from the course to analyze the change in users' community and development.	BT Level III
CO5	Identify and analyze the components and functions of information services within an organization.	BT Level III
CO6	Classify the significance of community-based information services in the Indian context.	BT Level IV

DETAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
	Basics of Community Information - Community Information: Definition,	
Unit 1	Origin and Scope - Need for and Sources of Community Information -	30
	Role of Libraries in Dissemination of Community Information	
Unit 2	Community Information Services - Community Information Services:	
	Meaning, Types and Target Users - Community Information Centres:	30
	Planning and Role of Information Services - Community Information	
	Services to Specific Communities a) Rural, Urban and Metropolitan	
	Communities b) Industrial, Business Communities c) Academic,	
	Research, Institutional and R & D Communities d) Physically/Mentally	
	Disadvantaged Communities e) Children, Women and Senior Citizens -	
	Community Information Services in India, UK and USA	
TOTAL PERIODS		60

TEXTBOOKS:

- 1. Babu, B. Ramesh and Gopalakrishnan, S. (2004). Information, Communication, Library and Community Development/edited by Delhi, B.R. Publishing.
- 2. Bunch, A. (1982) Community Information Services: Their Origin, Scope and Development. London, Clive Bingley.

MLISC SECOND SEMESTER

Danar Cara	MANAGEMENT OF LIBRARY AND INFORMATION CENTRE	Subject
	(Theory)	Code
2-1	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224C201

The objective of the course is to acquire knowledge on Management purposes in Library and Information Centre.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define knowledge of the principles, theories, and practices related to library and information center management, including organizational structures, policies, and procedures.	BT Level I
CO2	Explain a comprehensive understanding of the fundamental principles and concepts underlying Total Quality Management, including its history, evolution, and key components.	BT Level II
CO3	Explain the key principles, theories, and functions of Human Resource Management within organizational contexts.	BT Level III
CO4	Develop effective communication skills to articulate SWOT analysis findings.	BT Level III
C05	Develop a library budget, including identifying budget priorities, setting financial goals, and creating budget plans aligned with the library's mission and objectives.	BT Level IV
C06	Identify and analyze the unique characteristics and features of various information products and services.	BT Level IV

DETAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
Unit 1	Management Concept, Functions and Principles; Schools of Management Thought: Classical, Scientific, Behavioural, Decision Theory, Contingency Approach, Systems Approach.	15
Unit 2	Planning: Concept, Need and Levels; Management by Objectives (MBO); Decision Making. Total Quality Management (TQM); Change Management.	15
Unit 3	Human Resource Management: Manpower Planning; Job Analysis, Job Description and Job Evaluation; Recruitment Procedures; Performance Appraisal; Leadership; Communication Process; Motivation; Organizational Manual; Annual Report.	15
Unit 4	Budgeting- Concept, Principles and Types; Resource Mobilisation for Libraries and Information Centres; Marketing of Information Products and Services. SWOT Analysis; Project Management.	15
TOTAL PERIODS		60
- 1. Chabhra, T. N.et al. (2000). Management and organisation. New Delhi: Vanity Book International.
- 2. P. Balasubramanian (2021). Management of Libraries and Information Centers. Ess Ess Publication. New Delhi

REFERNCE BOOKS:

- 1. Beardwell, Ian & Holden, Len. (1996). Human resource management: A contemporary prespective. U.K: Longman.
- 2. Bryson, Jo. (1996). Effective library and information management. Bombay: Jaico Publishing House.
- 3. Bryson, Jo. (2011). Managing information services: A sustainable approach. England: Ashgate Publishing, Ltd.
- 4. Cartin, Thomas. J. (1998). Principles and practices of organisation. New Delhi: Prentice Hall of India.
- 5. Cascio, Wayne. (2012). Managing human resources (9th edition). Retrieved from <u>www.amazon.com</u>
- 6. Chopra, H. S. (1996). Information marketing. New Delhi: Rawat Publications.
- 7. Daft, Richard. L., & Marcic, Dorothy. (2012). Understanding management (8th edition).
- 8. Ducker, Peter. F. (2002). Management challenges for the 21st century. Oxford: Butterworth Heinemann.

Paper Core	LIBRARY AUTOMATION SOFTWARE PACKAGE	Subject
	(Theory)	Code:
2-2	L-T-P-C :3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224C202

COURSE OBJECTIVE:

This is to train the students on Open-Source Library Management Software and Software

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define theoretical knowledge about the concept, evolution, and types of library automation systems, including Integrated Library Systems (ILS), Library Management Systems (LMS), and other software packages.	BT Level I
CO2	Explain theoretical frameworks and standards such as MARC (Machine-Readable Cataloging), Z39.50 protocol, and other industry standards used in library automation.	BT Level II
CO3	Explain theoretical discussions on emerging trends, innovations, and future developments in library automation software.	BT Level II
CO4	Apply GNU licensing to software projects, ensuring compliance with open-source principles.	BT Level III
CO5	Analyze real-world examples of OAI-PMH implementation and the use of GNU licensing in diverse open-source projects.	BT Level IV
C06	Discuss about cloud-based systems, open-source solutions, and evolving technologies.	BT Level VI

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
Unit 1	Open-Source Software (OSS): Overview, Philosophy and Characteristics; Overview of Commercial Software, Free Software and Freeware; Standards: National Information Standards Organisation (NISO) and The Digital Library Federation (DLF); Metadata: Dublin Core, MARC, Resource Description and Access (RDA); Open Archives Initiative (OAI- PMH); Licensing Policy: GNU, Open-Source Licenses and Free Software.	15
Unit 2	Library standards – scope, objectives, types and advantages; Library automation standards – global and national; Open standards – features, application and advantages; Library automation software – functional requirements, global recommendations and RFPs; ILSs available in India – types and features; Open-source software in library automation;	15
Unit 3	Library system and subsystems; Procedural model of library automation; Software-level requirements for automation workflow; Components - Acquisition subsystem, Cataloguing subsystem, Circulation subsystem and Serials control subsystem;	15
Unit 4	Trends and future of library automation software – Web-scale discovery, linked open data, Cloud based library automation, Library mashup etc.	15

TOTAL PERIODS

60

REFERENCE BOOKS:

- 1. "Koha LiveCD." Mizstik Projects, n.d. http://mizstik.com/projects/koha-livecd/.
- 2. "Koha selected as finalist for the 2003 Trophees du Libre award," May 5, 2003. http://linuxpr.com/releases/5839.html.
- 3. Breeding, Marshall. (2010) "LibLime Acquisition by PTFS Marks a New Era for Koha." Library Journal, http://www.libraryjournal.com/article/CA6714841.html.
- Chawner, Brenda. (2002). "Koha: an open source success story." Library Link November http://mustafa.emeraldinsight.com/vl=12220074/cl=48/nw=1/rpsv/librarylink/technology/ nov 02.htm.
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- Engard, Nicole. "Zotero Integration Koha Open Source ILS Integrated Library System." Koha Library Software Community, n.d. http://koha- community.org/documentation/3-2manual/?ch=x8295#AEN8354.
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- 9. Guillaume Hatt. (2010). "New Era for Koha: PTFS Acquires LibLime." Library Journal, InfoTech.
- 10. Haydock, Ian. (2010). "PTFS to acquire Liblime." Meeting on the ledge.http://ianhaydock.wordpress.com/2010/01/14/ptfs-to-acquire-liblime/.
- 11. Horton, Valerie(2010). "Major Shake, Rattle and Roll in Koha Land." Collaborative Librarianship News. http://collaborativelibrarianship.wordpress.com/2010/01/13/major- shake-rattle-androll-in-koha-land/.

ADDITIONAL READINGS:

- 1. Breeding, Marshall. (2002) "An Update on Open Source ILS." Information Today 19, no. 9 : 42.
- 2. Devika P.M. (2009). "A Digital Library of Library and Information Science using DSpace", http://drtc.isibang.ac.in.
- 3. Ksharma, A(2006). "Koha on Windows Open Source Software for Library Management: A Case Study of IISS." Journal of Library & Information Science 31, no. 2: 97 109.
- 4. Kumar V (2008). Selection and management of open source software in libraries. Asian School of Business, Padmanabha Building, TechnoPark, Trivandrum.
- 5. Madalli DP (2008). "A Digital Library of Library and Information Science using DSpace" http://drtc.isibang.ac.in.

Paper Core 2-3	LIBRARY AUTOMATION SOFTWARE PACKAGE	Subject
	(Practical)	Code:
	L-T-P-C: 0-0-8-4 Credit point: 4 Scheme of Evaluation: (P)	LIB224C213

COURSE OBJECTIVE:

This is to train the students on Open-Source Library Management Software and Software

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define practical knowledge of different library automation software packages available in the market, their features, functionalities, and how they support library operations.	BT Level I
CO2	Develop skills in implementing library automation systems, including installation, configuration, and customization according to the specific needs of the library.	BT Level III
CO3	Develop managing library databases within the automation software, including cataloging, indexing, and maintaining accurate records of library holdings.	BT Level III
CO4	Develop best practices for ensuring data security within the automation system, implementing backup procedures, and disaster recovery plans.	BT Level III
CO5	Develop the ability to generate reports and analytics using the data collected through library automation.	BT Level III
CO6	Explore the integration of new technologies, such as RFID, AI, and cloud-based solutions, into the library automation system.	BT Level IV

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
Unit 1	Open-Source Operating System (e.g., Linux) Hosting: Client, Server; Library Management Software: Proprietary and OSS; Introduction to proprietary software: SOUL , Library Management Software: Koha ,	10
Unit 2	Practical's on Open-Source Library Management Software (e.g., Koha): Introduction, Features, Architecture, Standards, Installation, Customization, and Use of Modules. Acquisition – Settings and Module; Cataloguing - Settings and Module; Serials control - Settings and Module; Circulation and Patron Management; Report generation, Export/Import; Tools and Utilities.	20
Unit 3	Practical's on Open-Source Library Management Software (e.g., SOUL): Introduction, Features, Architecture, Standards, Installation, Customization, and Use of Modules. Acquisition – Settings and Module; Cataloguing - Settings and Module; Serials control - Settings and Module; Circulation and Patron Management;	20

	Report generation, Export/Import; Tools and Utilities.	
	ILS Administration and User Interface: OPAC, OPAC 2.0, OPAC	
Unit 4	Mashup; Usage statistics through Web analytics; Configuration	10
	of Enhanced features; Privilege control; Backup and Restoration.	
TOTAL PERIODS		60

ADDITIONAL READINGS:

- 1. Breeding, Marshall. (2002) "An Update on Open Source ILS." Information Today 19, no. 9 : 42.
- 2. Devika P.M. (2009). "A Digital Library of Library and Information Science using DSpace", http://drtc.isibang.ac.in.
- Ksharma, A(2006). "Koha on Windows Open Source Software for Library Management: A Case Study of IISS." Journal of Library & Information Science 31, no. 2: 97 – 109.
- 4. Kumar V (2008). Selection and management of open source software in libraries. Asian School of Business, Padmanabha Building, TechnoPark, Trivandrum.
- 5. Madalli DP (2008). "A Digital Library of Library and Information Science using DSpace" http://drtc.isibang.ac.in.
- 6. <u>https://soul.inflibnet.ac.in/</u>
- 7. https://koha-community.org/

Paper Core 2-4	LIBRARY SYSTEM ANALYSIS AND DESIGN (Theory) L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	Subject Code LIB224C204
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COURSE OBJECTIVE:

The paper will enable students with or without prior training on computer systems or programming skills to develop and manage information systems in libraries and similar information environment using the following essentials: (1) Information systems concepts, (2) Requisite Skills, (3) System Methodologies, (4) System Development Tools, and (5) Perspectives on the successful development of systems.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define the library system as well as its various sub- components or sections.	BT Level I
CO2	Compare the knowledge of interacting entities, including computer systems analysis and library as a system, different tools, and techniques of analysis.	BT Level II
CO3	Identify the effective packaging and repackaging of information for effective dissemination of information products and services to library users.	BT Level III
CO4	Utilize the skill about information need, information seeking behaviour, information seeking in both human and technological contexts to the students and concept of user studies, user education and their importance.	BT Level III
CO5	Develop a comprehensive understanding of informatrics and bibliometrics as quantitative methods for analyzing information and bibliographic data.	BT Level VI
CO6	Develop a comprehensive understanding of scientometrics, altmetrics, and webometrics as distinct disciplines within bibliometrics.	BT Level VI

MODULES	TOPIC AND COURSE CONTENT	PERIODS
Unit 1	Information Systems Definitions; Types of Systems: Transaction Processing Systems, Management Information Systems, and Decision Support Systems; System Development Life Cycle; Systems Development Process: Traditional Waterfall, Prototyping, Computer-Aided Software Engineering (CASE), Joint Application Design (JAD), Rapid Application Development (RAD), Agile Methodologies and eXtreme Programming.	15
Unit 2	Systems Acquisition; Outsourcing; Sources of Software; Off-the-Shelf Software Selection Criteria; Request for Proposal (RFP) and Annual Maintenance Cost (AMC); Initiating and Planning: Process, Elements, Deliverables and Outcomes; Feasibility Assessment: Economic Feasibility, Technical Feasibility and Other Feasibility Concerns; Baseline Project Plan.	15

Unit 3	System Implementation: Coding, Testing, Installation, System Documentation, User Training and Support; System Maintenance: Types, Cost and Managing Maintenance; System Analyst: Role, Responsibilities and Required Skills; Security and Ethics.	15
Unit 4	Informatrics, Bibliometrics, Scientrometrics, Almetrics &Webometrics Bibliometric Laws: Lotka's,Bradford's and Zipf's Law; Citation Analysis, Co-citation Coupling and Bibliographic Coupling; Bibliographical Database.	15
	TOTAL PERIODS	60

- 1. Avison, D. E. and Guy Fitzgerald (2006). Information Systems Development: Methodologies, Techniques & Tools (4th Ed.). McGraw-Hill
- 2. Hoffer, Jeffrey A., Joey F. George, and Joe Valacich (2013). Modern Systems Analysis and Design (7th Ed.). Pearson Education, Limited

REFERENCE BOOKS:

- 1. Chiang, Roger, Keng Siau, and Bill C. Hardgrave (2009). Systems Analysis and Design: Techniques, Methodologies, Approaches, and Architectures (Volume 15 of Advances in Management Information Systems Series). M.E. Sharpe
- 2. Davis, William S.and David C. Yen (2010). The Information System Consultant's Handbook: Systems Analysis and Design. CRC Press
- 3. Dennis, Alan, Barbara Haley Wixom, and Roberta M. Roth (2008). Systems Analysis and Design (4th Ed.). John Wiley & Sons
- 4. Eberhart, George M. (2006). The whole library handbook (4th Ed.), Volume 4, American Library Association
- 5. Joachim Baumeister (2004), Agile Development of Diagnostic Knowledge Systems. IOS Press
- 6. Kirikova, Marite (2002). Information Systems Development: Advances in Methodologies, Components, and Management. Springer
- 7. Pasquarelli, Maria Luiza R. (1992). Integrated Library System: Two Case Studies: Latin America and India. Concept Publishing Company
- 8. Vasilecas, Olegas (2005). Information Systems Development: Advances in Theory, Practice, and Education. Springer

Paper DSE 2-1	COLLECTION AND REFERENCE MANAGEMENT	Subject
	(Theory +Practical)	Code
	L-T-P-C = 2-0-2-4 Credit point: 4 Scheme of Evaluation:	LIB224D211
	(T+P)	

COURSE OBJECTIVE:

The subject provides skills to students on collection development which is one of the basic and vital activities in all libraries and also learn hand on practice of reference management.

COURSE OUTCOME:

	On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL	
C01	Define the principles and strategies involved in building, evaluating, and managing collections of various information resources.	BT Level I	
CO2	Compare with various reference tools, databases, bibliographic sources, and digital repositories to efficiently locate and retrieve information for users.	BT Level II	
CO3	Utilize technology tools and software for managing references, bibliographies, and citations, enhancing reference service delivery.	BT Level III	
CO4	Compare the various tools and features offered by Reference Management System for organizing and managing references.	BT Level IV	
CO5	Explain the citation style editor to modify existing styles or create custom styles based on specific journal requirements.	BT Level V	
CO6	Develop practical skills in installing and setting up reference management software and utilize	BT Level VI	

MODULES	TOPIC AND COURSE CONTENTS	PERIODS
Unit 1	Collection Development – Concept; Goals and Methods; Principles of Collection Development – Principles by Ranganathan; Drury; Dewey; Library of Congress and American Library Association; Collection Development Policies – Concepts and Types; Planning for Collection; Development – Committees; Staffing; Budgeting; Implementation and Evaluation	15
Unit 2	Selection Tools – Types: Bibliographies; Publishers' Catalogues and Book Reviews Evaluation of Selection Tools Stock Verification and Rectification; Preservation of Collection (Print and Non-Print)– Concepts; Goals and Methods	15
Unit 3	Reference Management System – Overview, Concept, Utilization.	15

	Hand on Practice in Mendeley Reference Management	
	Software - Overview of Mendeley Tools, Feature and	
	Installation, Integration, Customization.	
Unit 4	Citation: concept, need and purpose; Online citation tools;	15
	Authority files; Hand on Practice in Zotero Reference	
	Management Software-Overview of Zotero Tools, Feature and	
	Installation, Integration, Customization.	
TOTAL PERIODS		60

- 1. Vicki L. Gregory (2019). Collection Development and Management for 21st Century Library Collections: An Introduction. ALA Neal-Schuman.
- 2. Abdul Mannan Khan (2023). Collection Development Its Organization And Services, Ess Ess Publications, New Delhi.

REFERENCE BOOKS:

- 1. Kovacs, B. (1990). The Decision-Making Process for Library Collections: Case Studies in Four Types of Libraries. In Wasserman,P (Ed.), Contributions in Librarianship and Information Science no. 65. New York: Greenwood Press.
- 2. Magrill, R.M., & Corbin, J. (1989). Acquisitions Management and Collection Development in Libraries (2nd ed.). Chicago: American Library Association.
- 3. Mount, E. (1995). Special Libraries and Information Centers: An Introductory Text

(3rd ed.). Washington, DC: Special Libraries Association.

- Osburn, C. B., & Atkinson, R. (Eds.), (1991). Collection Management: A New Treatise Vols. 1-2. Greenwich, CT: JAI Press, Inc.
- 5. Sellen, B.C., & Curley, A. (Eds.). (1992). The Collection Building Reader. New York: Neal-Schuman Publishers, Inc.
- 6. Systems and Procedures Exchange Center, Kit 151. (1989). Qualitative Collection Analysis: The Conspectus Methodology. Washington, DC: Association of Research Libraries.
- 7. Systems and Procedures Exchange Center, Kit 207. (1995). Organization of Collection Development. Washington, DC: Association of Research Libraries.

Dapor DSF	INFORMATION AND COMMUNICATION TECHNOLOGY	Subject
	(Theory)	Code
2-2	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D202

Information communication technology gradually occupying the core of library and information services is undeniably augmented by the day owing to the intensive technological development. The scope such implications are rather vast and extensive but this paper will lay the foundation for keeping abreast with the present and future development of the application of information communication technology in library and information science. The content of this paper are fundamental requirements to build such foundation.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define a foundational understanding of information and communication technology, including its history, basic principles, and components.	BT Level I
CO2	Illustrated internet fundamentals, networking concepts, protocols, and the role of networks in communication, data transfer, and information sharing.	BT Level II
CO3	Explain the various software applications and tools used in ICT, including productivity software, programming languages, databases, and specialized applications for specific purposes.	BT Level II
CO4	Develop a clear understanding of circuit-switched and datagram switching as fundamental concepts in telecommunications and computer networking.	BT Level III
CO5	Develop a fundamental understanding of telecommunication connectivity and its role in enabling communication between devices and networks.	BT Level III
C06	Comparative analysis of SMTP, POP, and IMAP in terms of their use cases, advantages, and limitations.	BT Level IV

MODULES	TOPICS AND COURSE CONTENT	PERIODS
Unit 1	Introduction to Communication Systems and Telecommunications; Data Communications: Components, Representation and Data Flow; Networks: Criteria, Physical Structures and Topologies; Network Categories: LAN, WAN, MAN and Internetwork; Protocols and Standards; Network Models: Layered Task Concept, Open System Interconnect (OSI) Model and TCP/IP	15
Unit 2	Data to Signal Conversion: Line coding, Block coding and Scrambling; Data Transmission Modes: Parallel and Serial; Multiplexing: Frequency Division Multiplexing (FDM) and Time Division Multiplexing (TDM); Spread Spectrum: Frequency Hopping Spread Spectrum (FHSS) and Direct Sequence Spread Spectrum (DSSS); Transmission Media: Wired and Wireless	15
Unit 3	Switching: Circuit-Switched, Datagram, and Virtual Circuit Network; IEEE Standards on Local Area Network; Wired Local Area Network:	15

	Standard, Bridged and Switched Ethernet; Wireless Local Area Network: Bluetooth Architecture and Layers; Connecting Devices: Passive/Active Hubs, Repeaters, Bridges, Switches (layer two & three), Routers, and Gateway; File Transfer Protocol (FTP) and Remote	
	Logging	
Unit 4	Connectivity: PSTN, DSL and Lease line; Email: Architecture, User Agent, SMTP, POP, IMAP and Web Mail; WWW: Client, Server, URL and Cookies; Web Documents: Static, Dynamic and Active; HTTP: Transaction, Persistent/Non- persistent Connection and Proxy Server; Streaming Audio/Video using Web Server, Metafile and Media Server; Real-Time Interactive Audio/Video; VoIP (Voice over Internet Protocol)	15
	TOTAL PERIODS	60

- 1. Bradley, Phil, (2004). World Wide Web: How to design and Construct Web Pages (2nd Rev. Ed.). Psychology Press.
- 2. Forouzan, A. Behrouz, (2007). Data Communications & Networking (4th Special Indian Edition). Tata McGraw-Hill Education.

REFERENCE BOOKS:

- 1. Bradley, Phil (2012). How to Use Web 2.0 in Your Library (2nd Ed.). Facet Publishing.
- 2. Casey, Michael E. and Laura C. Savastinuk (2007). Library Two Point Zero (2nd Ed.). Information Today, Inc.
- 3. Courtney, Nancy (2007). Library 2.0 and beyond: innovative technologies and tomorrow's user. Libraries Unlimited.
- 4. Farkas, Meredith G. (2007). Social Software in Libraries: Building Collaboration, Communication, and Community Online. Information Today, Inc.
- 9. Papadimitriou, Georgios I., Andreas S. Pomportsis, P. Nicopolitidis, and Mohammed S. Obaidat (2003). Wireless Networks. John Wiley & Sons.
- 10. Thomas, Charles F. (2003). Libraries: the Internet, and Scholarship: Tools and Trends Converging. CRC Press.
- 11. White, Curt M. (2012). Data Communications and Computer Networks: A Business User's Approach (7th Edition). Cengage Learning.

MLISC THIRD SEMESTER

Dapar Cara	INFORMATION RETRIEVAL	Subject
	(Theory)	Code:
5-1	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224C301

COURSE OBJECTIVE:

The objective of the course is to acquire knowledge on retrieval of document and information storage.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Give in-depth knowledge on Automatic Information Retrieval, orient the students with the search strategies, Academic Databases	BT Level - I
CO2	Learn about information retrieval in the context of Library and Information Science with its basic models, techniques and strategies.	BT Level - II
CO3	Familiarize with different tools, Vocabulary Control and its practical usage in information handling and dissemination.	BT Level - II
CO4	Acquaint with different Indexing techniques being employed by the libraries of contemporary era.	BT Level - III
C05	Develop a deep understanding of information retrieval models and their significance in organizing and retrieving relevant information from large datasets.	BT Level - III
CO6	Function of language models as a paradigm for information retrieval, emphasizing the use of statistical language modeling techniques.	BT Level - IV

MODULES	TOPICS AND COURSE CONTENT	PERIODS
Unit 1	Information Retrieval (IR): Concept, Nature; Content Analysis: Concept and Types; Mapping the Information Content, Methods, Vocabulary Control; Subject Indexing: Sear's List and LCSH, Thesaurus, Thesaurofacet, Classaurus, Automatic Indexing, COMPASS.	15
Unit 2	Indexing languages; Index construction: Concepts, Theory: Rationalist theories of Indexing; Historicist, Hermeneutical Theories of indexing Pragmatic and Critical Theories of indexing,; Pre- coordinate Indexing System, Chain indexing, PRECIS - Preserved Context Index System, POPSI – Postulate based Permuted Subject Indexing, SLIC – Selective Listing in Combination; Post-coordinate indexing system, Uniterm Indexing System, Title derived Indexing System,	15
Unit 3	Types of search: Boolean, Proximity, Fuzzy, Iterative Search Techniques; Structure for Dictionaries, Querying, Wildcard Queries, Interpretation, Full Text Search, Spelling Correction, Phonetic Correction, Search engines, Web Search Basics, Z39.50, Metadata in IR	15

	Clustering, Web Crawling, and Link Analysis. Emerging Trends in IR: Artificial Intelligence, Expert System, Text Summarization, Text	10
	Compression and Optical character recognition (OCR)	
Total Periods		60

- 1. Baeza-Yates, R. A., and Ribeiro-Neto, B. (2010). Modern Information Retrieval (2nd Ed.,). Massachusetts: Addison-Wesley.
- 2. Baldi,P P. Frasconi, P. Smyth. (2003). Modeling the Internet and the Web: Probabilistic Methods and Algorithms. England: Wiley

REFERENCE BOOKS:

- 1. Frohmann, B. (1990). Rules of Indexing: A Critique of Mentalism in Information Retrieval Theory. Canada, Journal of Documentation. 46(2), 81-101.
- 2. Grossman, David. A and Ophir Frieder. (2004). Information Retrieval: Algorithms and Heuristic (The Information Retrieval Series) (2 Ed.,). USA: Springer
- 3. Liur, Tie-Yan. (2011). Learning to Rank for Information Retrieval. USA: Springer.
- 4. Mihalce, Rada and Dragomir Radev. (2011). Graph-Based Natural Language Processing and Information Retrieval. USA: Cambridge University Press.

Paper Coro	DIGITAL LIBRARY SOFTWARE PACKAGE	Subject
	(Theory)	Code
5-2	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224C302

This paper will articulate an understanding of the conceptual and pragmatic basis of digital libraries in the framework of traditional library activities and services particularly of the following nature:

(a) Determination of digital collection, creation, and conversion of both print and digitally born resources,

(b) Establishing procedural workflow without compromising to legal and ethical concerns including copyrights, preservation, and accessibility,

(c) Application of metadata schemes, evaluation and selection of equipment and software

essential for the organization and control of digital objects in various formats.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Gain a comprehensive understanding of the principles, theories, and concepts underlying digital libraries, including their architecture, functionalities, and purposes.	BT Level - I
CO2	Ability to curate and manage digital collections, including digitization processes, metadata creation, content organization, and preservation strategies using digital library software.	BT Level - II
CO3	Comprehend principles and practices related to digital preservation, including long-term storage, migration strategies, and ensuring the accessibility and sustainability of digital library collections.	BT Level - III
CO4	Develop a solid understanding of workflow concepts and their significance in streamlining business processes.	BT Level - III
CO5	Develop a comprehensive understanding of metadata-level and content-level harvesting as essential processes in information retrieval and data management.	BT Level - III
CO6	Analyze the challenges and opportunities associated with searching and discovering resources on the web at a large scale.	BT Level - IV

MODULES	TOPICS AND COURSE CONTENTS		
Unit 1	Definitions and Concepts: Digital Libraries and Institutional Repositories; Benefits and Limitations; Planning: Strategies and Implementation; Building: Acquisition, Management and Dissemination. Basic Concepts of Hybrid Libraries, Library Portals and Repositories; Institutional Repository: Planning, Content Submission and Acquisition.	15	

Unit 2	Digital Formats: Textual and Non-textual; Character Encoding: Issues, Schemes and Standard; Mark-ups: Procedural, Presentational and Descriptive; Electronic Image: Resolution, Pixel and Color Encoding; Image Compression: Lossless and Lossy Techniques; Portable Document Format: Object types, features, application software, embedded images and true PDF; Document Conversion: Word to PDF/HTML/XML and XML to HTML/PDF.	15
Unit 3	Infrastructural Requirements: Equipment, Software, Manpower and Costs; Workflow: Process, Document Management, Scanning, OCR (Optical Character Recognition) and Editing; Digitization for Preservation; Metadata: Types, Standards and Harvesting; Digital Library Website and Content: Visibility, Accessibility and Search- ability;	15
Unit 4	Digitization and collection development (hardware, software, process, file formats, issues, policies and principles, collection management); Collection development – steps and best practices; Federated search service – metadata-level and content-level harvesting; Web-scale resource discovery, Semantic web and digital libraries;	15
TOTAL PERIODS		60

- 1. Arms, William Y. (2001). Digital Libraries (2nd Ed.), Digital Libraries and Electronic Publishing Series MIT Press.
- 2. Lesk, Michael, (2005). Understanding Digital Libraries (2nd Ed., revised). Elsevier.

REFERENCE BOOKS:

- 1. Borgman, Christine L. (2000). From Gutenberg to the Global Information Infrastructure. The MIT Press.
- 2. Cohen, S. & Williams, R. (1999). Non-Designer's Scan & Print Book (1st edition). Peachpit Press.
- 3. Kresh, Diane (2007). The Whole Digital Library Handbook. American Library Association.
- 4. Murray, J.D. & van Ryper W. (1996). Encyclopedia of Graphics File Formats (2nd Edition). O'Reilly & Associates, Inc.
- 5. Ranganathan, S. R. (1962). Elements of Library Classification. Asia Publishing House, Bombay, 1962
- 6. Seadle, M. and Greifeneder, E. (1999). Defining a Digital Library, Library Hi-Tech, 2007, 25(2), 169-173
- 7. Taylor, A.G. (1999). The Organization of Information. Library and Information Science Text Series

Danar DSE	DIGITAL LIBRARY SOFTWARE PACKAGE	Subject
	(Practical)	Code
5-1	L-T-P-C: 0-0-8-4 Credit point: 4 Scheme of Evaluation: (P)	LIB224D311

To provide basic concepts related to digital library software with hands-on practice.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define the concept, significance, and evolution of digital libraries in the context of modern information management.	BT Level I
CO2	Compare the user interface of digital library software, demonstrating competence in accessing various features and functionalities.	BT Level II
CO3	Build a digital library project using the software package, demonstrating proficiency in real-world application.	BT Level III
CO4	Develop user-friendly interfaces and provide value-added services to enhance user experience within the digital library platform.	BT Level III
CO5	Develop a comprehensive understanding of metadata and its role in describing, organizing, and facilitating access to digital resources.	BT Level III
CO6	Explore best practices for creating, maintaining, and updating metadata in diverse information environments	BT Level IV

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
Unit 1	Overview of DSpace: History, Concept, Advantages, Metadata;	10
	Overview of Greenstone/ E-Print: History, Implement, Advantage,	
	Metadata	
Unit 1	Metadata management; Collection building and Collection delegation; Multilingual data management; Access and Usage management. Import and Export of Metadata, Metadata Creation, Addition and Deletion.	10
Unit 2	Hand on Practice DSpace Digital Library Software: Installation, User Interface, Collection Building, Uploading, and Previewing.	20
Unit 4	Hand on Practice Greenstone/E-Print Digital Library Software: Installation, User Interface, Collection Building, Uploading, and Previewing.	20
	TOTAL PERIODS	60

REFERENCE BOOKS:

- 1. Arms, William Y. (2001). Digital Libraries (2nd Ed.), Digital Libraries and Electronic Publishing Series MIT Press.
- 2. Bradley, Phil (2012). How to Use Web 2.0 in Your Library (2nd Ed.). Facet Publishing.
- 3. Jones, Wayne, Judith R. Ahronheim, and Josephine Crawford (2002). Cataloging the Web: Metadata, AACR, and MARC 21. Lanham, Md. Scarecrow Press.
- 4. Lee, Stuart D. (2001). Digital Imaging: A Practical Handbook. Neal-Schuman (University of Michigan).
- 5. Lesk, Michael, (2005). Understanding Digital Libraries (2nd Ed., revised). Elsevier.
- 6. Witten, Ian H., David Bainbridge and David M. Nichol (2009). How to Build a Digital Library (2nd Ed. revised). Morgan Kaufmann.
- 7. Zhang, Allison B. and Don Gourley (2008) Creating Digital Collections: A Practical Guide. Chandos Pub.
- 8. Cornell University Library. Moving Theory into Practice: Digital Imaging Tutorial. Available online at http://www.library.cornell.edu/preservation/tutorial/contents.html
- 9. Information Management Resource Kit. "Digital Libraries, Repositories and Documents." Available online at http://www.imarkgroup.org/moduledescription_en.asp?id=111
- 10.Library Technology Services, Harvard University Information Technology. "Digital Projects Guide". Available online at http://hul.harvard.edu/ois/digproj/projguide.html.
- 11. Washington State Library. Digital Library Best Practices. Available online at http://digitalwa.statelib.wa.gov/newsite/best.htm.
- 12. Sun Microsystems. The Digital Library Toolkit. 3rd edition. Available at http://www.ncsi.iisc.ernet.in/raja/is214/is214-2005-01-04/digital_library_toolkit-ed3.pdf

ADDITIONAL READINGS:

- 1. Borgman, Christine L. (2000). From Gutenberg to the Global Information Infrastructure. The MIT Press.
- 2. Cohen, S. & Williams, R. (1999). Non-Designer's Scan & Print Book (1st edition). Peachpit Press.
- 3. Kresh, Diane (2007). The Whole Digital Library Handbook. American Library Association.
- 4. Murray, J.D. & van Ryper W. (1996). Encyclopedia of Graphics File Formats (2nd Edition). O'Reilly & Associates, Inc.
- 5. Ranganathan, S. R. (1962). Elements of Library Classification. Asia Publishing House, Bombay, 1962
- 6. Seadle, M. and Greifeneder, E. (1999). Defining a Digital Library, Library Hi-Tech, 2007, 25(2), 169-173
- 7. Taylor, A.G. (1999). The Organization of Information. Library and Information Science Text Series.

	PRESERVATION AND CONSERVATION OF MATERIALS	Subject
Paper DSE 3-2	(Theory)	Code
	L-T-P-C = 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D302

COURSE OBJECTIVE:

The objective of the course is to acquire knowledge of library materials and it's preservation and conservation.

COURSE OUTCOME:

0	e able to	
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define the basic concepts of preservation and conservation and give the basic concepts of binding materials and process.	BT Level I
CO2	Explain about different preservation methods and strategies, including environmental control, handling guidelines, storage practices, and disaster preparedness and response.	BT Level II
CO3	Illustrate the principles that govern preventive conservation, including environmental control, proper handling, storage, and integrated pest management.	BT Level II
CO4	Apply skills in conducting risk assessments for preservation threats such as pests, humidity, light exposure, and implementing measures to mitigate risks.	BT Level III
CO5	Develop a comprehensive understanding of the concept of heritage preservation and its significance in safeguarding cultural, historical, and intellectual assets.	BT Level III
CO6	Examine with national and international preservation standards, guidelines, and best practices recommended for cultural heritage preservation.	BT Level IV

MODULES	TOPICS AND COURSE CONTENT	PERIODS
Unit 1	Meaning, Concept, Definition; History and Development: preservation in early historical period, Preservation in the age of enlightenment, Preservation in the modern age; Meaning and concept of rare documents, manuscripts; Need, purpose and importance of Preservation and Conservation of rare documents, manuscripts; Management of preservation activities and actions; Restoration: Meaning, Concept, Definition & Need	15
Unit 2	Evolution of Writing Materials; Palm Leaves: Their Nature and Preservation; Manuscripts, Books, Periodicals, Newspapers; Non- Book Materials; Micro-documents; Digital Documents; Enemies of Library Materials -Physical, Chemical, Biological Agents, Natural disasters and Calamities Control of Deterioration- Environment Control, Microbiological Agents, Rehabilitation Repair and Restoration Binding: Types, Process & Standards	15

Unit 3	Types of Conservation: Meaning and definition of Preventive Conservation and Curative Conservation; Methods of Preventive Conservation: Basic methods of Handling, Cleaning, Dusting, Preserving of Documents; Methods of Curative Conservation: Process, Control and Monitoring of Deterioration caused by Environmental Factors, Microclimate; Process, Control and Monitoring of Deterioration caused by Chemical Factors, Acidity and Acidic Materials; Process, Control and Monitoring of Deterioration caused by Biological Factors Control on Man-made Factors and Natural Calamities; Steps and Actions of Curative Conservation	15
Unit 4	Role and Initiatives of Library and archives in preservation of heritage collections; Role of International Organizations: IFLA, UNESCO; Role and Initiatives of Govt. of India: National Archives of India, National Library of India, Asiatic Society of India, IGNCA, NMM etc. ; Role and Initiatives of Govt. of Assam: Kamrup Anusandhan Samity, Assam State Archives, Satras, Universities and Colleges of Assam	15
TOTAL PERIODS		60

- 1. Agarwal, O.P. (1977) Care and Preservation of Museum Objects, New Delhi: National Research Laboratory for conservation of cultural property.
- 2. Brian J. Baird & Jody Brown (2018) Practical Preservation and Conservation Strategies for Libraries, Rowman & Littlefield Publishers, Lanham, Maryland, U.S.

REFERENCE BOOKS:

- 3. Guidelines for Control and Prevention of Termite Infestation in Archives and Libraries, (1991). New Delhi: National Archives of India.
- 4. Jeyraj, V.(1995). Care of Archival Materials, Thanjavur Saraswati Mahal Series No: 395.
- 5. Bokhare, Narendra. (1997). Conservation of Manuscripts: Prevention is Better Than Cure-
- 6. Conservation of Cultural Property in India. Vol 30. New Delhi: p52-63
- 7. Gupta, C.B. & Haider, S.H. (1995). Conservation Practices in Ancient India-CCPI, vol-28, New Delhi: P36-43
- 8. Prasad, Lalan Kumar. (1995). Protection of Documents from Photo Chemical Effects of Light-CCPI,
- 9. Vol-28, New Delhi: p45-49

Donor DCE	DATABASE MANAGEMENT SYSTEM	Subject
	(Theory)	Code
3-3	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D303

The extensive used of database system in the management of information resources, digital or physical, and the indispensability of such knowledge for information professionals to cope with future developments calls for an extensive understanding of the database management systems. Keeping in mind the library and information professionals whose requirement to handle database technology are binding to a great extent, this paper is intended to develop a comprehensive understanding of the nature, technological environments, models, and applications of database management system.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define the concepts such as data models, schema design, normalization, indexing, and querying languages.	BT Level I
CO2	Define and explain the basic concepts of the relational data model.	BT Level I
CO3	Explain the Database Management System (DBMS) software, understanding database architectures, security, and transactions.	BT Level II
CO4	Develop the Knowledge of database administration tasks such as backup and recovery, user management, access control, and performance tuning	BT Level III
C05	Build communication skills in presenting and explaining database concepts, collaborating in database design projects, and effectively documenting database structures and processes.	BT Level III
C06	Analyze real-world scenarios and effectively apply ER modeling to capture and represent the underlying data structure.	BT Level IV

MODULES	TOPICS AND COURSE CONTENT	PERIODS
	Introduction, Characteristics and Advantages; Database	
	Concepts: Data Models, Schemas and Instances; Database	
Unit 1	Architectures: Three Schema Architecture, Centralized and	1 🗖
Unit 1	Client/Server; Data Independence; Database: Languages and	15
	Interfaces, Database System Environment; Classification of	
	Database Management Systems; Phases of Database Design	
	Entity-Relationship (ER) Model: Entity Types, Entity Sets,	
Unit 2	Attributes and Keys; Relationships in ER Model: Relationship	
	Types, Relationship Sets, Roles and Constraints; Naming	15
	Conventions and Design Issues; Enhanced Entity-Relationship	
	(EER) Model: Subclasses, Superclasses and Inheritance;	

	Constraints, Specialization and Generalization Hierarchies in EER	
Unit 3	Data Abstraction, Knowledge Representation and Ontology Concepts; Relational Data Model: Concepts, Constraints and Schemas; Update Operations, Transactions and Constraint Violations; Relational Database Standard; Functional Dependencies; Normalization for Relational Databases; Relational Database Design	15
Unit 4	Object-Oriented Databases Concepts: Object Identity, Object Structure and Type Constructors; Encapsulation of Operations, Methods and Persistence; Types Class Hierarchies and Inheritance; Object Database Standards, Languages and Design; Object Relational and Extended Databases System; Emerging Database Technologies and Applications	15
	TOTAL PERIODS	60

- 1. Elmasri, Ramez and Navathe, Shamkant B. (2011). Fundamentals of Database Systems (6th Edition). Addison-Wesley
- 2. Elmasri, Ramez, Fundamentals of Database Systems (5 Ed.). Pearson Education India, 2008

REFERENCE BOOKS:

- 1. Hentzen, Whil,(2007) MySQL Client-Server Applications with Visual FoxPro (Hentzenwerke Series). Hentzenwerke.
- 2. Solosky, Stephen C.(2002), Microsoft Access: Practice and Exercises (Rev. Ed.). Kendall Hunt Publishing Company.
- 3. Welling, Luke and Laura Thomson, (2003), Php and Mysql Web Development (2nd Ed.).Sams Publishing.
- 4. Adamski, Joseph J. and Kathy T. Finnegan, (2010) New Perspectives MS Access 2010. Cengage Learning.

Danar DSE	APPLICATION OF INTERNET	Subject
	(Theory)	Code
5-4	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D304

The objective of the course is to acquire knowledge of Internet applications.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
CO1	Define on internet	BT Level I
CO2	Define key terms and concepts related to intranet and internet security.	BT Level I
CO3	Explain on various web language and web browsers.	BT Level II
CO4	Demonstrate a comprehensive understanding of the fundamental principles of information security.	BT Level II
CO5	Utilize the conceptual knowledge of internet tools.	BT Level III
CO6	Analyze user feedback on blogs, wikis, and social community websites.	BT Level IV

DETAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENT	PERIODS
Unit 1	Internet: An Overview - Internet: Introduction, Historical Development and Scope of Internet - Internet Architecture: H/W & S/W Component, Client/Server Principle, Routers, Internet Connection Types, ISP, Protocols, Uniform Resource Locator, IP Address - Domain Name System	15
Unit 2	Web Languages & Web Browsers - Web: Introduction, History and Function - Web Languages: HTML, XML, CSS, ASP, JavaScript, PHP - Web Browsers: Internet Explorer, Mozilla Firefox, Google Chrome.	15
Unit 3	Intranet & Internet Security - Intranet: Components, Prerequisites and Services - Extranet: Components, Prerequisites and Services - Internet Security: Types of Security, Firewalls, Anti-Virus, Anti-Spyware	15
Unit 4	Internet Tools & Services - Communication Tools: Email, Telnet, Discussion Groups - Search Tools: Gopher, Veronica, Jughead, Archie, Search Engines - Content Enriching Services: Blogs, Wikis, Social Community Websites	15
	TOTAL PERIODS	60

TEXTBOOKS:

- 1. Bates, Chris. (2006). Web Programming: Building Internet Applications. 3rd ed. New Delhi: Wiley-India.
- 2. Crumlish, Christian. (2007). The ABCs of the Internet. New Delhi : BPB Publications.

REFERENCE BOOKS:

- 1. Hartl, Michael and Prochazka, Aurelius. (2007). RailsSpace: Building a Social Networking Website with Ruby on Rails. Addison-Wesley Professional.
- 2. Kalbach, James. (2007). Designing Web Navigation: Optimizing the User Experience. Sebastopol: O'Reilly Media.
- 3. Miller, Joseph B. (2008). Internet Technologies and Information Services (Library and Information Science Text Series). Libraries Unlimited.
- 4. Morville, Peter and Rosenfeld, Louis. (2006). Information Architecture for the World Wide Web: Designing Large-Scale Web Sites. 3rd ed. Sebastopol: O'Reilly Media.
- 5. Nair, R. Raman. (2002). Internet for Information Services. New Delhi : Ess Ess Publications. Robbins,
- 6. Jennifer Niederst. (2012). Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics. 4th ed. Sebastopol: O'Reilly Media.
- 7. Sehgal, R. L. (2000). Internet and Internet for Librarians. New Delhi : Ess Ess Publications.
- 8. Russell, Jesse and Cohn, Ronald (eds.). (2012). Web Browser. Book on Demand Ltd.
- 9. Stallings, William. (2007). Computer Networking with Internet Protocols and Technology. Delhi : Pearson Education.
- 10. Weinberg, Tamar. (2009). The New Community Rules: Marketing on the Social Web. Sebastopol: O'Reilly Media.

Domon Como	LIBRARY HOUSE KEEPING OPERATIONS	Subject
	(Practical)	Code
5-5	L-T-P-C: 0-0-8-4 Credit point: 4 Scheme of Evaluation: (P)	LIB224C321

This paper prepares students for their future role as library professionals through theoretical and hands-on activities in the classroom and the RGU Central Library and a part from experience with various categories of libraries in the state as well as country.

COURSE OUTCOME:

0	On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL	
CO1	Explain the principles and application of library classification systems.	BT Level II	
CO2	Develop skills in proper shelving techniques, arranging materials according to classification systems (such as Dewey Decimal or Library of Congress), and maintaining a well-organized library layout.	BT Level III	
CO3	Develop skills in descriptive Cataloging, subject analysis, and authority control for accurate and comprehensive bibliographic representation.	BT Level III	
CO4	Apply proficiency in using ILMS for automating library housekeeping tasks.	BT Level III	
CO5	Classify records, reports, and documentation related to housekeeping operations, including inventory logs, maintenance schedules, and incident reports.	BT Level IV	
CO6	Compare variety of library types, such as academic libraries, public libraries, special libraries, and archives, understanding their unique functions, resources, and services.	BT Level IV	

MODULES	TOPICS AND COURSE CONTENTS	PERIODS
Unit 1	Overview of RGU Central Library Operations : Acquisition; Technical; Circulation; Periodical; Reference; Documentation and Maintenance	
Unit 2	E-Resources: A Report on observation of the Electronic Resources including Green Open Access, Gold Open Access, hybrid Resources and Mandate Open Access is to be submitted to the Department for evaluation by an external examiner.	25
Unit 3	Job Diary: A Report on observation of the RGU Central Library operations is to be submitted to the Department for evaluation by an external examiner. A viva voce on observations and the report will also be conducted by the Department.	35
Unit 4	Study Tour Diary: A Report on operations of Libraries visited during the study tour is to be submitted to the Department for evaluation by an external examiner. A viva voce on observations and the report will also be conducted by the Department.	
	TOTAL PERIODS	35

- 1. Beardwell, I., & Holden, L. (1996). Human resource management: A contemporary perspective. UK: Longman.
- 2. Bryson, J. (1999). Effective library and information management. Bombay: Jaico Publishing House.

REFERENCE BOOKS:

- 1. Narayan, G.J. (1991). Principles and practice of management. New Delhi: Prentice Hall of India.
- 2. Scammell, Alison. (Ed.). (2001). Handbook of information management (8th ed.). London: Aslib-IMI. Retrieved from
- 3. Wijnhoven, Fons. (2009). Information Management: An informing approach. New York: Routledge.

MLISC FOURTH SEMESTER

Paper Core 4-1	E-LEARNING AND CONTENT MANAGEMENT SYSTEM	Subject
	(Theory and Practical)	Code
	L-T-P-C: 2-0-2-4 Credit point: 4 Scheme of Evaluation:	LIB224C411
	(T+P)	

Is to train the students on Learning Management and Content Management System Using, Open-Source Software.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
CO1	Define the concept of e-learning and its various forms (synchronous, asynchronous, blended learning).	BT Level I
CO2	Define and explain the fundamental concepts of Content Management Systems (CMS).	BT Level I
CO2	Demonstrate proficiency in using a CMS platform to create, manage, and organize e-learning content.	BT Level II
CO3	Apply instructional design principles to create engaging and effective e-learning content.	BT Level III
CO4	Utilize CMS tools for tracking student progress, analyzing learning analytics, and evaluating the effectiveness of e-learning content.	BT Level III
C06	LMS tools for tracking student progress, analyzing learning analytics, and evaluating the effectiveness of e-learning content.	BT Level IV

MODULES	TOPIC AND COURSE CONTENT	PERIODS
Unit 1	E-Learning, Evolution of E-Learning –Generations of distance education; Open-Source Software for Content Management System (CMS): Media Wiki, Joomla, Drupal, Zope; Wiki Hosting Services, Wiki Technologies in Libraries for Designing Subject Based Encyclopaedias'; Subject directory/portal,	10
Unit 2	Open-Source Software for Learning Management System (LMS): Moodle, A Tutor, (The Virtual Classroom). Courseware Management system; Massive Open Online Courses: Background, Concept; Process leading to development of e- content.	10
Unit 3	Practice on CMS (e.g., Joomla / Drupal/WordPress) - Installation and Customization - Basic Requirements, Manual Installation, Hosting, Configuration Settings, Publishing Content Using, RSS Feed Integration, Designing.	20
Unit 4	Practice on LMS (e.g., Moodle / A-Tutor) - Installation and Customization -Basic Requirements, Manual Installation,	20

Configuration Settings., Live Classroom, Designing, Video	
Lecture Room, Plugin Integration.	
TOTAL PERIODS	60

- 1. Boiko, Bob. (2005). Content Management Bible (2nd Ed.,). USA: Wiley Publishing, Inc.
- 2. Buchner, Alex. (2011). Moodle 2 Adminstration. UK: Packt Publishing, Ltd.

REFERENCE BOOKS:

- 1. Burge, Stephe. (2011). Joomla ! Explained : Your Step-by-step. USA: Pearson Education, Inc.
- 2. Dvorak, Radana. (2011). Moodle for Dummies. USA: Wiley Publishing, Inc.
- 3. Goldstein. (2001). CMS Made Simple Development Cookbook. UK: Pact Publishing, Ltd.
- 4. Hauschildt, Sofia. (2010). CMS Made Simple 1.6. UK: Packt Publishing, Ltd.
- 5. Hogbin, Emma Jane. (2011). Drupal User's Guide: Building and Administering a Successful Durpal-Powered Website. USA: Person Education, Inc.

ADDITIONAL READINGS:

- 1. Drupal Tutorial How to use Drupal CMS www.siteground.com/tutorials/drupaltutorial/
- 2. http://atutor.ca/view/16/16092/1.html
- 3. http://docs.joomla.org/
- http://extensions.joomla.org Find lots of very cool extensions to further enhance your Joomla! websites.
- 5. http://forum.joomla.org/ Sign up for the forums, search, and ask questions, even helping others if you are able!
- 6. http://help.atutor.ca/index/index.php
- 7. http://help.joomla.org Find more documentation and training information.
- 8. http://www.joomla.org Find a way to give something back to the community!
- 9. http://www.siteground.com/tutorials/atutor/atutor_installation.htm

Dapar Cara	DIGITAL RESOURCES MANAGEMENT	Subject
	(Theory)	Code
4-2	L-T-P-C: 4-0-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224C402

To provide nature, features, scopes, and limitations of digital information resources and also know the use of text retrieval and support tools in organizing digital resources;

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define digital resources and their types (e.g., text, images, videos, multimedia).	BT Level - I
CO2	Define and explain the fundamental concepts of text retrieval	BT Level - I
CO3	Explain the importance of effective management of digital resources in various contexts (education & libraries, etc.).	BT Level - II
CO4	Apply ethical practices and guidelines for respecting intellectual property rights in digital resource management.	BT Level - III
CO5	Develop a better understanding on library 2.0 & web 2.0	BT Level - III
C06	Analyze text retrieval engines that support multimedia and cross-media content.	BT Level - IV

MODULES	TOPIC AND COURSE CONTENT	PERIODS
Unit 1	Definition, scope, features and advantages of digital information resources; Socio-legal aspects of digital information resources (copyright, other IPR issues, licensing issues)	15
Unit 2	Text retrieval engines – scope, features and utilities; Retrieval features of selected text retrieval engines – Apache-Solr, and Zebra; Open-Source Software for Document Management System (DMS): OMEKA– Feature, Plugins, Image Metadata, Video Metadata, Feature, Plugins, Architecture. Open-Source Software for Journal Management System (JMS): OJS (Open Journal System) - Feature, Plugins, Metadata, Feature, Plugins, Architecture. ; CORAL is an electronic resources management system: Feature, Plugins, Architecture.	15
Unit 3	Web 2.0 - what, why, components and use; Web 2.0 tools and technologies; Library 2.0 – application of Web 2.0 tools in library services; information mashup; Trends and future. Web 2.0 and Library 2.0– RSS, Wikimedia, Blog, Social networking, Social, bookmarking, Carousel etc;	15
Unit 4	Metadata - what, why, types and use;	15

 schemas.	60
Qualified); Domain-specific metadata schema – Learning	
Metadata models and best practice guidelines; Generic metadata schema – Dublin Core (Simple and	

- 1. Akerkar, R. (2009). Foundations of the Semantic Web: XML, RDF and ontology. Oxford U.K: Alpha Science International.
- 2. Arthur, M. H. (2006). Expanding a digital content management system: For the growing digital media enterprise. Amsterdam: Elsevier Focal Press.

REFERENCE BOOKS:

- 1. Berry, M. W., & Browne, M. (2005). Understanding search engines: Mathematical modeling and text retrieval. Philadelphia, PA: SIAM, Society for Industrial and Applied Mathematics.
- 2. Casey, M. E., & Savastinuk, L. C. (2007). Library 2.0: A guide to participatory library ervice. Medford, N.J: Information Today.
- 3. Chin, A. G. (2001). Text databases and document management: Theory and practice. Hershey, Pa: Idea Group Pub.
- 4. Courtney, N. (2007). Library 2.0 and beyond: Innovative technologies and tomorrow's
- 5. user. Westport, Conn: Libraries Unlimited.
- 6. Croft, W. B., Metzler, D., & Strohman, T. (2010). Search engines: Information retrieval in practice. Boston: Addison-Wesley.

ADDITIONAL READING:

- Akerkar, R. (2009). Foundations of the Semantic Web: XML, RDF and ontology. Oxford, U.K: Alpha Science International.
- 2. Arthur, M. H. (2006). Expanding a digital content management system: For the growing digital media enterprise. Amsterdam: Elsevier Focal Press.
- 3. Chin, A. G. (2001). Text databases and document management: Theory and practice. Hershey, Pa: Idea Group Pub.
- 4. Croft, W. B., Metzler, D., & Strohman, T. (2010). Search engines: Information retrieval in practice. Boston: Addison-Wesley.
- 5. Omeka: https://omeka.org/
- 6. Open Journal System: <u>https://pkp.sfu.ca/software/ojs/</u>
- 7. Coral: http://coral-erm.org/

Danar DSE	DIGITAL RESOURCES MANAGEMENT	Subject
	(Practical)	Code
4-1	L-T-P-C: 0-0-8-4 Credit point: 4 Scheme of Evaluation: (P)	LIB224D411

To explore the use of Digital Resource Management Systems and Semantic web technologies in library systems with hands-on practice.

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define role of metadata in organizing and describing information resources.	BT Level I
CO2	Explore and apply metadata standards and schemas such as Dublin Core, MARC, and MODS.	BT Level II
CO3	Apply metadata standards and protocols (e.g., Dublin Core) in real-world scenarios to enhance resource discoverability and accessibility.	BT Level III
CO4	Develop and implement metadata schemas tailored to categorize and organize digital resources effectively.	BT Level III
CO5	Develop digital preservation techniques like format migration, backup, and archiving, ensuring long-term accessibility and usability of resources.	BT Level III
CO6	Analyze effective search strategies within Digital Resource Management systems for quick and precise retrieval of resources.	BT Level IV

MODULES	TOPIC AND COURSE CONTENT	PERIODS
Unit 1	Hand on Practice on OJS (OPEN JOURNAL SYSTEM) - Feature, Plugins, Metadata, Architecture and Modules.	20
Unit 2	Hand on Practice on OMEKA – Feature, Plugins, Image Metadata, Video Metadata, Architecture.	20
Unit 3	Hand on Practice on CORAL is an electronic resources management system: Feature, Plugins, Architecture and Modules.	20
Unit 4	Metadata management; Collection building and Collection delegation; Import and Export of Metadata, Metadata Creation, Addition and Deletion; Backup and Restore; Indexing with search engine and database (Ex. Google Scholar/ Academic/ Base)	10
	TOTAL PERIODS	60

- 1. Akerkar, R. (2009). Foundations of the Semantic Web: XML, RDF and ontology. Oxford U.K: Alpha Science International.
- 2. Arthur, M. H. (2006). Expanding a digital content management system: For the growing digital media enterprise. Amsterdam: Elsevier Focal Press.

REFERENCE BOOKS:

- 1. Berry, M. W., & Browne, M. (2005). Understanding search engines: Mathematical modeling and text retrieval. Philadelphia, PA: SIAM, Society for Industrial and Applied Mathematics.
- 2. Casey, M. E., & Savastinuk, L. C. (2007). Library 2.0: A guide to participatory library ervice. Medford, N.J: Information Today.
- 3. Chin, A. G. (2001). Text databases and document management: Theory and practice. Hershey, Pa: Idea Group Pub.
- 4. Courtney, N. (2007). Library 2.0 and beyond: Innovative technologies and tomorrow's user. Westport, Conn: Libraries Unlimited.
- 5. Croft, W. B., Metzler, D., & Strohman, T. (2010). Search engines: Information retrieval in practice. Boston: Addison-Wesley.

ADDITIONAL READING:

- Akerkar, R. (2009). Foundations of the Semantic Web: XML, RDF and ontology. Oxford, U.K: Alpha Science International.
- 2. Arthur, M. H. (2006). Expanding a digital content management system: For the growing digital media enterprise. Amsterdam: Elsevier Focal Press.
- 3. Chin, A. G. (2001). Text databases and document management: Theory and practice. Hershey, Pa: Idea Group Pub.
- 4. Croft, W. B., Metzler, D., & Strohman, T. (2010). Search engines: Information retrieval in practice. Boston: Addison-Wesley.
- 5. Omeka: https://omeka.org/
- 6. Open Journal System: <u>https://pkp.sfu.ca/software/ojs/</u>
- 7. Coral: http://coral-erm.org/

Danar DSE	RESEARCH METHODOLOGY	Subject
	(Theory)	Code
4-2	L-T-P-C :3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D402

COURSE OBJECTIVE:

The objective of the course is to acquire knowledge on research and research methodology

COURSE OUTCOME:

On Successful completion of the course the students will be able to		
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL
C01	Define research and its significance in various disciplines.	BT Level I
CO2	Define and explain the fundamental concepts of research.	BT Level I
CO3	Demonstrate an understanding of the fundamental principles underlying research, including its purpose, process, and various approaches.	BT Level II
CO4	Identify and select suitable research methodologies, techniques, and data collection methods based on the research questions and objectives.	BT Level III
C05	Apply critical thinking skills to solve research problems, address challenges, and adapt research methodologies as necessary.	BT Level III
C06	Compare different citation styles commonly used in academic writing (e.g., APA, MLA, Chicago, Harvard).	BT Level IV

MODULES	TOPIC AND COURSE CONTENT	PERIODS
Unit 1	Research- meaning, need and significance; Types of Research- descriptive, analytical, applied, fundamental, quantitative, qualitative, conceptual, empirical, interdisciplinary, multidisciplinary and collaborative; Identification of Research Problem- concept, need and process of selecting the problem; Variables; Hypothesis- meaning, testing of hypotheses and procedure for hypothesis testing; Designing a Research Proposal- components and procedure.	15
Unit 2	Methods: Historical Method; Scientific Method, Experimental Method; Descriptive Method; Survey Method and Case Study. Data collection tools and techniques: Questionnaire; Schedule; Interview; Observation, etc.	15
Unit 3	Data Analysis and Interpretation: Descriptive Statistics- Measures of Central Tendency; Mean, Mode, Median; Tabulation and Generalisation; Measures of dispersion, variance and covariance; Standard Deviation Graphical presentation of data. Parametric and Non-Parametric test; Statistical Packages.	15
Unit 4	Citation and Referencing: Citation style manual; Citation style manual APA, CHICAGO, IEEE, MLA; Technical Writing:	15

Writing Research plans	/proposals; Research reports:
structure, style, concepts,	guidelines for research reporting
TOTAL PER	DDS 60

- 1. Krishan Kumar (1992). Research Method in Library and Information Science, Delhi, Har-Anand Publications.
- 2. Kothari, C R (2008). Research Methodology: Methods and Techniques, New Delhi, New Age International (p) Limited

REFERENCE BOOKS:

- 1. Borgman, Christine L., ed. (1990). Scholarly Communication and Bibliometrics. Newbury Park, CA: Sage Publications, Inc.
- 2. Moore, Nick (2000). How to do research: the complete guide to designing and managing research projects, 3 ed. London: Facet
- 3. Powel, Ronald R. (1991). Basics Research Methods for Librarians. 3rd Ed. Norwood NJ:
- 4. Sharma Pandey, S. R. (1990). Universe of Knowledge and Research Methodology, Delhi, Kent Publications
- 5. Trochim, William (2002). Research Methods Knowledge base 2nd ed., Cincinnati, Alemic Dog Publishing.
- 6. Vaughan, Liwen. (2001). Statistical methods for Information professionals: A Practical painless approach to understanding, using and interpreting statistics. N.J.: Information Today.

Danar DSE	MEDIA INFORMATION LITERACY AND COPY RIGHT	Subject
	(Theory)	Code
4-5	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D403

Course Objective:

The objective of the course is to acquire knowledge on information literacy in the context of different media and to acquire knowledge of copyright.

Course Outcome:

On Successful completion of the course the students will be able to			
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL	
CO1	Define on media and information literacy model.	BT Level I	
CO2	Define media landscape, including traditional and digital media platforms.	BT Level I	
CO3	Explain information literacy for their academic work.	BT Level II	
CO4	Develop the concept of Intellectual Property Right and copyright.	BT Level III	
CO5	Develop digital literacy skills for effective online communication and collaboration.	BT Level III	
CO6	Compare the guidelines and Standards: UNESCO, IFLA and ALA for Information Literacy.	BT Level IV	

MODULES	TOPICS AND COURSE CONTENT	PERIODS
Unit 1	Information Literacy: Definition, Models and Standards; Strategic Plan; Information Literacy and Lifelong Learning; Information Society and Information Literacy	15
Unit 2	Media Literacy, Computer Literacy, Information Literacy and Media Literacy; Media Literacy and Bridging the Digital Divide; Media Literacy: Impact on Academic, Public, and Special Library	15
Unit 3	Media and Information Literacy: Major Initiatives in USA, UK and Australia; Policies, Guidelines and Standards: UNESCO, IFLA and ALA; Media and Information Literacy: Skills and Competencies; Media and Information Literacy: Best Practices	15
Unit 4	Intellectual Property Rights IPR: Concept, Genesis, Development and Categories - Digital Rights Management, IPR Acts and its Application in Electronic Environment; Violation and Infringement of IPR Copyright and Patents; Patent Laws in India & Abroad	15
TOTAL PERIODS		60
TEXTBOOKS:

- 1. Ainley, P. (1980). Basics of community information: An action handbook for librarians. London: Association of Assistant Librarians.
- 2. American Library Association. (1966). Minimum standards for public library systems. Chicago: ALA.

REFERENCE BOOKS:

- 1. Bunch, A. (1982). Community information services: the origin, scope and development. London: Clive Bingley.
- 2. Bunch, A. (1993). The basics of community information work. London: Library Association.
- Coleman (P). (1986). Community information policy and provisions. ASLIB Proceedings, 38 (9), 305-316.
- 4. (Morehead State University). (1975). The library as a community information and referral center. Morehead, Ky: Appalachian Adult Education Center, Morehead State University.
- 5. Durrance, J. C., & Fisher, K. E. (2002). Online community information: Creating a nexus at your library. Chicago, Ill: American Library Association.
- 6. Durrance, J. C., & Schneider, K. G. (1996). Public library community information activities: Precursors of community networking partnerships. Ann Arbor:
- School of Information, University of Michigan. Retrieved March, 5, 1997. Available http://www.si.umich.edu>
- 8. Durrance, J.C. (1986). Community information services: an innovation at the beginning of its second decade. In Advances in librarianship, (Vol. V–13). Orlando: Academic Press.
- 9. Keehan, A. L. (1980). Establishing a local community information service: Part 1. Library Board of Western Australia.

Donor DCE	MARKETING OF LIBRARY AND INFORMATION SERVICES	Subject
	(Theory)	Code
4-4	L-T-P-C: 3-1-0-4 Credit point: 4 Scheme of Evaluation: (T)	LIB224D404

COURSE OBJECTIVE:

The objective of the course is to acquire knowledge on Marketing of Library and Information Services in context to social media.

COURSE OUTCOME:

On Successful completion of the course the students will be able to				
SL. NO	COURSE OUTCOME	BLOOMS TAXONMY LEVEL		
C01	Define on marketing of library and information services.	BT Level I		
C02	Define and explain the fundamental concepts of social media.	BT Level I		
CO3	Explain the underlying technologies that power social media platforms.	BT Level II		
CO4	Develop the advertising tools on major social media platforms.	BT Level III		
C05	Compare of social media, technical aspect, various platform and their use in Library Services and Marketing.	BT Level IV		
C06	Analyze the various tools of Social Media.	BT Level IV		

DATAILED SYLLABUS:

MODULES	TOPICS AND COURSE CONTENT	PERIODS
	Social Media: Concept, Technology & Tools - Social Media	
Unit 1	Tools - Technology Requirement for SNS Platform - SNS	30
	Platforms: Academic, Professional, Individual - The	
	Outcasts of Social Media: Blogs, Videos, Wikis, Podcast	
	Social Media: Marketing of Library and Information	30
	Services - Principles and Strategies of Social Media	
Unit 2	Marketing - Promotion of Library Services through Social	
Unit 2	Media: Academic Library, Public Library, Special Library -	
	Social Interaction: Connecting Communities through	
	Social Media - Social Media	
TOTAL PERIODS		60

REFERENCE BOOKS:

- 1. Taylor and Francis group. (2014). Use of social media by library: current practices and future opportunities.
- 2. ALA (2001). Libraries making good use of social media and Web 2.0
- 3. Mickiernan, G. (2009). Friends: Social networking sites for engaged library services. http://onlinesocialnetworks.blogspot.com/

- 4. Tuten, T.L. (2001). Advertising 2.0 Social media marketing in a Web 2.0 World. Book review. http://blogcritics.org/books/article/book-review-advertising-20-social-media/
- 5. Lon Safko (2010) The Social Media Bible: Tactics, Tools & Strategies for Business Success, New Jersey: John Wiley and Sons.

Paper Core 4-3	DISSERTATION	Subject
	L-T-P-C: 0-0-14-8 Credit point: 8 Scheme of Evaluation: (P)	Code LIB224C421

COURSE OBJECTIVE:

The objective of the course is to acquire knowledge on preparation of a dissertation after carry out a research project.

COURSE OUTCOME:

Students will have the practical knowledge and technical steps to carry out a research project.

Note: Each student will be allotted a research topic with the consent of the supervisor. The dissertation is supposed to be submitted at the end of the semester followed by evaluation. In the course, total marks will consist as under:

- 1. Dissertation Reports (70 marks) and
- 2. Viva Voce (30 marks)

The students will be required to write a dissertation on the following themes:

- 1. Literature review of any current topic in library and information science
- 2. Conducting case studies and surveys of libraries located in the north-east of India
- 3. Designing a database using a library software package
- 4. Studies related to information retrieval on Internet
- 5. Any other studies related to library and information science
