

# MASTER OF LIBRARY AND INFORMATION SCIENCE

**M.Lib.I.Sc (2 Year)**

**2024 Admission onwards**



**REGULATIONS**  
**SCHEME AND SYLLABUS**

## **REGULATIONS FOR ADMISSION TO MASTER OF LIBRARY AND INFORMATION SCIENCE**

The M.Lib.I.Sc. (2Year) programme is envisaged as post graduate course in Library and Information Science. M.Lib.I.Sc. programme is to make a student competent with basic information skills, both traditional and modern. The students will be prepared as efficient, progressive, human professionals with initiative, drive and integrity.

### **1. PROGRAMME OUTCOMES**

<b>PO1</b>	Our graduates will be able to manage all kinds of library and information centers effectively
<b>PO2</b>	Our graduates will be able to handle all kinds of information sources and services in the modern era
<b>PO3</b>	Our graduates will enhance technical and research skills in the field of Library and Information Science
<b>PO4</b>	Our graduates will be aware of the role of libraries towards achieving the quality education
<b>PO5</b>	Our graduates will demonstrate professional ethics in the field of librarianship

<b>PO1:Our graduates will be able to manage all kinds of library and information centers effectively</b>
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PSO1a: Our students will be able to identify different aspects of library/information center administration and its relevant stakeholders.
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PSO1b: Our graduate will demonstrate the ability to integrate functional knowledge across domains in a managerial perspective.
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PSO1c: Our graduates will acquire proficiency and managerial skills for dealing with different information systems, services and products.
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<b>PO2:Our graduates will be able to handle all kinds of information sources and services in the modern era</b>
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PSO2a: Our graduates will be able to effectively serve the information needs of different types of users
PSO2b: Our graduates will become capable of handling various sources of information, their organization and thereby enhance the advanced skill to provide traditional and modern library services
<b>PO3:Our graduates will acquire technical and research skills</b>
PSO3a: Our graduates will get proficiency in the implementation and utilization of digital tools or the processing and dissemination of the information.
PSO3b: Our graduates will understand different stages in research process
PSO3c: Our graduates will understand the process of academic writing and publication.
<b>PO4:Our graduates will be aware of the role of libraries towards achieving the quality education</b>
PSO4a: Our graduates will be able to provide inclusive library services
PSO4b:Our graduates will understand the importance of quality education in sustainable development
<b>PO5: Our graduates will demonstrate Professional ethics in the field of Librarianship.</b>
PSO5a: Graduates will have an understanding of the basic principles and fundamental laws of librarianship.
PSO5b: To develop the knowledge, skills and attitude of the students leading to professional qualification for practicing librarianship as a career.

## **2. ELIGIBILITY FOR ADMISSION**

Candidates seeking admission to M.Lib.I.Sc. degree must have a pass with 50% marks (CGPA of 2 out of 4 or 5 out of 10) in any degree recognized by MG University. (Relaxation in Marks in the Qualifying Examination is based on M. G University rules).

### **Mode of Selection**

Admission to the programme is based on the marks obtained in the Entrance examination conducted by the college. The duration of the Entrance examination shall be one hour for 50 marks.

**Lateral entry**

Candidates seeking admission to the third semester of M.Lib.I.Sc. must have a pass with 50% marks or equivalent CGPA for their BLISc / B.Lib.I.Sc / equivalent degree examinations recognized by the MG University.

**Seat Availability**

In take is 30; Lateral seats will be filled subject to the availability of the vacancies.

Name of the Degree is M. Lib.I. Sc.

**3. DURATION OF THE PROGRAMME**

The duration of the programme shall extend over a period of two years consisting four semesters.

**4. MEDIUM OF INSTRUCTION**

The medium of instruction, examination, seminar and project report and other academic activities shall be in English.

**5. MODE OF TRAINING**

The mode training comprises lectures, tutorials, seminars, assignments, library observation work, laboratory work, field training/internships and study visits.

**6. ATTENDANCE**

The minimum requirement of attendance during a semester for appearing at the end-semester examination shall be 75% for each course. Condonation of shortage of attendance to a maximum of 15 days in a semester subject to a maximum of two times during the whole period of the programme may be granted by the University/College.

**7. EXAMINATIONS**

- 7.1 Evaluation:** The evaluation scheme for each course shall contain two parts; (a) End Semester Evaluation (ESE) (External Evaluation) and (b) Continuous Evaluation(CE) (Internal Evaluation). 25% weightage shall be given to internal evaluation and the remaining 75% to external evaluation and the ratio and weightage between internal and external is 1:3. Both End Semester Evaluation (ESE) and Continuous Evaluation(CE) shall be carried out using direct grading system.

**7.2 Direct Grading:** The direct grading for CE (Internal) and ESE (External Evaluation) shall be based on 6 letter grades (A+, A, B, C, D and E) with numerical values of 5,4,3,2,1 and 0 respectively.

**7.3 Grade Point Average (GPA):** Internal and External components are separately graded and the combined grade point with weightage 1 for internal and 3 for external shall be applied to calculate the Grade Point Average (GPA) of each course.

**7.4 Internal evaluation for Regular programme:** The internal evaluation shall be based on predetermined transparent system involving periodic written tests, assignments, seminars, lab skills, records, viva-voce etc.

**7.5 Components of Internal (CE) and External Evaluation (ESE):** Grades shall be given to the evaluation of theory / practical / project /comprehensive viva-voce and all internal evaluations are based on the Direct Grading System.

Proper guidelines shall be prepared by the BOS for evaluating the assignment, seminar, practical, project and comprehensive viva-voce within the framework of the regulation.

There shall be no separate minimum grade point for internal evaluation.

**7.6** The model of the components and its weightages for Continuous Evaluation (CE) and End Semester Evaluation (ESE) are shown in below: a) **For Theory(CE) (Internal)**

	<b>Components</b>	<b>Weightage</b>
i.	Assignment	2
ii.	Seminar	4
iii.	Best Two Test papers	4 (2 each)
<b>Total</b>		10

**(Average grade of best two test papers shall be considered. For test papers all questions shall be set in such a way that the answers can be awarded A+, A, B, C, D, E grade)**

**b) For Theory (ESE) (External)**

Evaluation is based on the pattern of questions specified in **7.8.4** for all courses except LS1 C05, LS2 C03 and LS E05. The evaluation pattern of these three courses is given below.

**LS1 C05 – Knowledge Organization- Library Classification (Practical)**

	Type of Questions	Weight	Number of Questions to be answered
PART A			
1	Problem Type	1	4 out of 6
2	Problem Type	2	3 out of 5
3	Problem Type	5	1 out of 2
PART B			
1	Problem Type	1	4 out of 6
2	Problem Type	2	3 out of 5
3	Problem Type	5	1 out of 2

**LS2 C03 – Knowledge Organization- Library Cataloguing (Practical)**

Sl. No	Type of Questions	Weight	Number of Questions to be answered
PART A	Problem Type	5	3 out of 5
PART B	Problem Type	5	3 out of 5

**LS E05 –Information Processing and Retrieval (Practical)**

Sl No	Type of Questions	Weight	Number of Questions to be answered
PART A	Problem Type	3	5 out of 7
PART B	Problem Type	5	3 out of 5

**c) For Practical (CE) (Internal)**

<b>Components</b>	<b>Weightage</b>
Written/Lab test	2
Lab involvement and Record	1
Viva	2
<b>Total</b>	<b>5</b>

**(The components and the weightage of the components of the practical (Internal) can be modified by the concerned BOS without changing the total weightage 5.)**

**d) For Practical (ESE) (External)**

<b>Components</b>	<b>Weightage</b>
Written / Lab test	7
Lab Involvement and Record	3
Viva	5
<b>Total</b>	<b>15</b>

**(The components and the weightage of the of the practical (External) can be modified by the concerned BOS without changing the total weightage 15.**

**e) For Project(CE)(Internal)**

<b>Components</b>	<b>Weightage</b>
Relevance of the topic and analysis	2
Project content and presentation	2
Project viva	1
<b>Total</b>	<b>5</b>

**(The components and the weightage of the components of the project(Internal) can be modified by the concerned BOS without changing the total weightage 5.)**

**f) For Project (ESE) (External)**

<b>Components</b>	<b>Weightage</b>
Relevance of the topic and analysis	3
Project content and presentation	7
Project report / Viva	5
<b>Total</b>	<b>15</b>

**(The components and the weightage of the components of the Project(External) can be modified by the concerned BOS without changing the total weightage 15.)**

**g) Comprehensive viva-voce (CE) (Internal)**

<b>Components</b>	<b>Weightage</b>
Basic Knowledge and presentation skills	1
Topic of Interest	1
Knowledge of Core courses	3
<b>Total</b>	<b>5</b>

**(Weightage of the components of the Comprehensive viva-voce (internal) shall not be modified.)**

**h) Comprehensive viva-voce (ESE) (External)**

<b>Components</b>	<b>Weightage</b>
Basic Knowledge and presentation skills	3
Topic of Interest	3



Knowledge of Core courses	9
<b>Total</b>	<b>15</b>

**(Weightage of the components of the Comprehensive viva-voce (external) shall not be modified.)**

To ensure transparency of the evaluation process, the internal assessment grade awarded to the students in each course in a semester shall be published on the notice board at least one week before the commencement of external examination.

There shall not be any chance for improvement for internal grade.

The course teacher and the faculty advisor shall maintain the academic record of each student registered for the course which shall be forwarded to the Controller of Examinations through the Head of the department and a copy should be kept in the department for verification for at least two years after the student completes the programme.

**7.7 External Evaluation:** The external examination in theory courses is to be conducted by the College at the end of the semester. The evaluation of the answer scripts shall be done by examiners based on a well-defined scheme of valuation.

The external evaluation shall be done immediately after the examination preferably through Centralized Valuation. Photocopies of the answer scripts of the external examination shall be made available to the students on request as per the rules prevailing in the University. The question paper should be strictly on the basis of model question paper set and directions prescribed by the BOS.

### **7.8 Pattern of Questions**

**7.8.1** Questions shall be set to assess knowledge acquired, standard, and application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and the ability to synthesize knowledge. Due weightage shall be given to each module based on content/teaching hours allotted to each module.

**7.8.2** A question paper shall be a judicious mix of short answer type, short essay type/problem solving type and long essay type questions.

**7.8.3** The questions shall be prepared in such a way that the answers can be awarded A+, A, B, C, D, E grades.

**7.8.4 Weight:** Different types of questions shall be given different weights to quantify their range as follows:

Sl. No	Type of Questions	Weight	Number of questions to be answered
1	Short Answer type questions	1	8 out of 10
2	Short essay/ problem solving type questions	2	6 out of 8
3	Long Essay type questions	5	2 out of 4

**7.9 Pattern of question for practical.** The pattern of questions for external evaluation of practical shall be prescribed by the Board of Studies.

**7.10 Direct Grading System.**

Direct Grading System based on a 6-point scale is used to evaluate the Internal and External examination taken by the students for the various courses of study.

Grade	Grade Points	Range
A+	5	4.50 to 5.00
A	4	4.00 to 4.49
B	3	3.00 to 3.99
C	2	2.00 to 2.99
D	1	0.01 to 1.99
E	0	0.00

**7.11 Performance Grading**

Students are graded based on their performance (GPA/SGPA/CGPA) at the examination on a 7-point scale as detailed below.

Range	Grade	Indicator
4.50 to 5.00	A+	Outstanding
4.00 to 4.49	A	Excellent
3.50 to 3.99	B+	Very good

3.00 to 3.49	B	Good (Average)
2.50 to 2.99	C+	Fair
2.00 to 2.49	C	Marginal (Pass)
Up to 1.99	D	Deficient (Fail)

**7.12 No separate minimum** is required for internal evaluation for a pass, but a minimum C grade is required for a pass in an external evaluation. However, a minimum C grade is required for pass in a course.

A student who fails to secure a minimum grade for a pass in a course will be permitted to write the examination along with the next batch.

**7.13 Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)**

**Calculations.** The SGPA is the ratio of sum of the credit point of all courses taken by a student in the semester to the total credit for that semester. After the successful completion of a semester, Semester Grade Point Average (SGPA) of a student in that semester is calculated using the formula given below.

$$\text{Semester Grade Point Average- SGPA [S}_j\text{]} = \sum [C_i \times G_i] / \sum C_i$$

(SGPA= Total Credit Points awarded in a semester/ Total credits of the semester)

Where ‘S<sub>j</sub>’ is the j<sup>th</sup> semester, ‘G<sub>i</sub>’ is the grade point scored by the student in the i<sup>th</sup> course ‘c<sub>i</sub>’ is the credit of the i<sup>th</sup> course.

**7.14 Cumulative Grade Point Average (CGPA)** of a programme is calculated using the formula: -

$\text{Cumulative Grade Point Average (CGPA)} = \frac{\sum (C_i \times S_i)}{\sum C_i}$
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(CGPA=Total credit points awarded in all semesters/Total credits of the programme)

Where ‘C<sub>i</sub>’ is the credits for the i<sup>th</sup> semester ‘S<sub>i</sub>’ is the SGPA for the i<sup>th</sup> semester. The SGPA and CGPA shall be rounded off to 2 decimal points.

For the successful completion of semester, a student shall pass all courses and score a minimum SGPA of 2.0. However, a student is permitted to move to the next semester irrespective of her/his SGPA.

#### **8. GRADE CARD**

The College under its seal shall issue to the students, a consolidated grade card on completion of the programme, which shall contain the following information.

- a) Name of the University
- b) Name of College
- c) Title of the PG Programme
- d) Name of the Semesters
- e) Name and Register Number of the student
- f) Code, Title, Credits and Max GPA (Internal, External & Total) of each course (theory& Practical), project, viva etc. in each semester.
- g) Internal, external and total grade, Grade Point (G), Letter Grade and Credit Point (P) in each course opted in the semester.
- h) The total credits and total credit points in each semester.
- i) Semester Grade Point Average (SGPA) and corresponding Grade in each semester
- j) Cumulative Grade Point Average (CGPA), Grade for the entire programme.
- k) Separate Grade card will be issued at the request of candidates and based on University/College Guidelines issued from time to time.
- l) Details of description of evaluation process- Grade and Grade Point as well as indicators, calculation methodology of SGPA and CGPA as well as conversion scale shall be shown on the reverse side of the grade card.

**9. PASS REQUIREMENTS:** Internal and end semester examination pass requirements as per the guidelines of the PG programmes of M G University will be applicable in this case.

**10. PHOTOCOPIES of the answer scripts** of the ESE shall be made available to the students for scrutiny on request Revaluation/ scrutiny shall be done as per the prevailing rules after collecting the prescribed fee (Scrutiny /Revaluation).

**11. GRIEVANCE REDRESSAL COMMITTEE:** There shall be a Grievance Reddressal Committee in each Department comprising of two teachers & HOD as Chairman. There shall be a College Level Grievance Redress Committee, comprising of two senior teachers, two staff council members and the Principal as the chairman.

**\*All other regulations and conditions are according to M G University rules of PG Programmes.**

*(These regulations shall come into force from the academic year 2024-26)*

**SCHEME AND SYLLABUS OF M.Lib.I.Sc (2 YEAR) PROGRAMME**

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>	<b>Duration of Exam</b>
<b>FIRST SEMESTER</b>			
LS1 C01	Foundations of Library and Information Science	4	3 Hrs
LS1 C02	Library and Information Centre Management	4	3 Hrs
LS1 C03	Information, Knowledge and Communication	4	3 Hrs
LS1 C04	Knowledge Organization – Library Classification (Theory)	4	3 Hrs
LS1 C05	Knowledge Organization - Library Classification (Practical)	4	3 Hrs
	<b>Total</b>	<b>20</b>	
<b>SECOND SEMESTER</b>			
LS2 C01	Information Sources and Services	4	3 Hrs
LS2 C02	Knowledge Organization - Library Cataloguing (Theory)	4	3 Hrs
LS2 C03	Knowledge Organization Library Cataloguing (Practical)	4	3 Hrs
LS2 C04	Information Technology Applications in LIS (Theory)	4	3 Hrs
LS2 C05	Information Technology (Practical)	4	3 Hrs
LS2 C06	Internship	2	
	<b>Total</b>	<b>22</b>	
First Year	<b>Total Credits</b>	<b>42</b>	

<b>THIRD SEMESTER</b>			
LS3 C01	Information Processing and Retrieval (Theory)	4	3 Hrs
LS3 C02	Research Methodology	4	3 Hrs
LS3 C03	Information Systems and Products	4	3 Hrs
LS3 C04	Information Technology Applications in LIS (Practical)	5	3 Hrs
LS E	Elective	3	3 Hrs
	<b>Total</b>	<b>20</b>	
<b>FOURTH SEMESTER</b>			
LS4 C01	Planning and Management of Library and Information Centers	4	3 Hrs
LS4 C02	Dissertation and Viva Voce	5	
LS E	Elective	3	3 Hrs
LS E	Elective	3	3 Hrs
LS E	Elective	3	3 Hrs
	<b>Total</b>	<b>18</b>	
Second Year	<b>Total Credits</b>	<b>38</b>	
	<b>TOTAL CREDITS</b>	<b>80</b>	

### **ELECTIVES**

<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>	<b>Duration of Exam</b>
<b>GROUP A</b>			
LS E01	Information Security	3	3 Hrs
LS E02	Data Science	3	3 Hrs

LS E03	Information Literacy	3	3 Hrs
<b>GROUP B</b>			
LS E04	Digital Resources	3	3 Hrs
LS E05	Information Processing and Retrieval (Practical)	3	3 Hrs
LS E06	Statistical Methods	3	3 Hrs
<b>GROUP C</b>			
LS E07	Digital Libraries	3	3 Hrs
LS E08	Technical Communication	3	3 Hrs
LS E09	Knowledge Management	3	3 Hrs



## SEMESTER 1

### LS1 C01- FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE

**(4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Understand the history of library movement and library science profession
2. Understand various types of libraries
3. Evaluate the process of resource sharing and extension services
4. Understand the concept of professional ethics

#### **UNIT 1      Library in the Social Context**

Development of Libraries in India Library:

Conceptual change.

Role of Libraries in Modern Society and Education.

Five Laws of Library Science.

Implications of Five Laws

#### **UNIT2      Types of Libraries**

Types of libraries: their distinguishing features and functions.

National Libraries, Public Libraries, Special Libraries, Kerala State Central

Library; Academic Libraries: School, College and University libraries National

Library of India

Digital Libraries: Functions, Features

#### **UNIT 3      Resource Sharing and Extension Service**

Resource Sharing

Library Extension Service, Library Publicity

Library Networks: NICNET, DELNET, ERNET, INFLIBNET

## **UNIT4      Library Movement and Public Library Legislation**

Need for Library Legislation

Essential features for Library Legislation

Library Movement and Library Legislation in India; National Mission on Libraries

Public Library Movement and Legislation in Kerala; Kerala Public Libraries Act, 1989; Press and Registration Act, Indian Copy Right Act, Delivery of Books and Newspaper Act.

## **UNIT 5      Library and Information Science Profession**

Librarianship as a Profession

Professional Ethics and human value

Professional Associations and Their Role: IFLA, ILA, IASLIC, IATLIS, CILIP, SLA, ALA, ASLIB

Promotion of library and information services by UNESCO, UGC, and RRRLF

Professional Skills and Competencies

Role of Library and Information Professionals in Digital Era

Women Librarianship

### **Reading list**

1. Choudhury, G. G. et al. Librarianship: An introduction. London: Facet, 2004.
2. Ajaykumar Raval. Handbook of public library system. New Delhi: Discovery Publishing, 2013.
3. Anil K Dhiman and Suresh C Sinha. Academic Libraries. New Delhi: Ess Ess Publication, 2002.
4. Anil K Dhiman. Handbook of special libraries and librarianship. New Delhi: Ess Ess Publication, 2008
5. Khanna, J. K. Library and society. New Delhi: Ess Ess Publications, 1994.
6. Kumar, P. S. G. Library in India Series. New Delhi: B. R. Publishing Corporation, 2008.
7. Macdougall, Alan F. and Prytherch, Ray, ed. Handbook of library cooperation. Mumbai: Jaico Publishing, 1997.

8. Ranganathan, S. R. The five laws of Library Science. Bangalore: Sarada Ranganathan Endowment for Library Science, 1988.
9. Paslithil, A. Public library movement: Kerala. Delhi: Kalpaz Publications, 2006.
10. Sharma, S K. Libraries and Society. New Delhi: EssEss Publication, 1987
11. Bhatt (R K). History and development of libraries in India. 1995. Mittal Publications, New Delhi.
12. Kumar, Krishan. Library organisation. 1993. Vikas, New Delhi.
13. C.A. Augustine, G. Devarajan, Public library system in India / editors, Ess Ess publications,1990

## **LS1 C02 LIBRARY AND INFORMATION CENTRE MANAGEMENT (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Develop analytical skill based on the general management tools and techniques.
2. Develop Advanced managerial skill development on library context.
3. Develop Practical knowledge in house-keeping and technical processing activities.
4. Create knowledge in Collection development and maintenance strategies.
5. Create in depth knowledge about Reader services, user needs, library administration tools, etc.
6. Improving financial management skills.

### **UNIT 1 Library Management**

Management: Concept, definition, characteristics, scope, functions and levels of management  
Management Schools of Thought: Classical, Neo-Classical and Modern management

Principles of Management: Fayol's Principles

Functions of Management: POSDCORB

Patterns of Library and Information Centre Organization

## **UNIT 2            Housekeeping Operations**

Collection Development

Acquisition: Selection, Ordering and Accessioning

Technical Processing: Classification, Cataloguing and Physical Processing of documents

Maintenance of Collection: Shelving, Rectification, Stock Verification, Binding and Weeding out, Care and Preservation

## **UNIT 3            Reader Services**

Circulation of Documents: Issue of membership, Charging systems

Reference Collection and Service Routines

Serials Control: Selection, Ordering, Recording the receipt and display documentation

Special Collections and Services

## **UNIT 4 Library Physical Planning, Administrative Tools and Techniques**

Library Building

Library Planning: Need, Objectives and Procedures

Library Furniture and Equipment

Library Committee, Library Rules, Staff Manual, Library Statistics and Annual Report.

## **UNIT 5            Library Budgeting**

Sources of Finance

Methods of financial estimation

Types of Expenditure

Types of Budgets: Line budget, Performance budget, PPBS, ZBB

### **Reading list**

1. Bryson, Jo. Effective library and information centre management. Hampshire, U. K.: Gower, 1990.

2. Bryson, Jo. Managing information services: A transformational approach. 2<sup>nd</sup>ed. Aldershot, UK: Ashgate Publishing, 2006.
3. Evans, G. Edward G. Management techniques for librarians. 2<sup>nd</sup>ed. New York: Academic Press, 1983.
4. Evans, G. Edward and Aire, Camila A. Management basics for information professionals. 3<sup>rd</sup>ed. London: Facet, 2013
5. Khanna, J. K. Handbook of library administration. New Delhi: Crest Publishing House, 2001.
6. Koontz, Harold and Weirich, Heinz Essentials of management: An international and leadership perspective. 9<sup>th</sup>ed. New Delhi: Tata McGraw-Hill, 2013.
7. Mittal, R. L. Library administration: Theory and Practice. 5<sup>th</sup>ed. New Delhi: Ess Ess Publications, 2007.
8. Principles of management. Retrievable from <http://www.saylor.org/site/textbooks/Principles%20of%20Management.pdf>
9. Ranganathan, S. R. Library administration. New Delhi: Ess Ess Publications, 2006.
10. Stueart, Robert D. and Moran, Barbara B. Library and Information Centre Management. Colorado: Libraries Unlimited, 2004.

## **LS1 C03 – INFORMATION, KNOWLEDGE AND COMMUNICATION (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Identify and evaluate the role of knowledge and communication in social development.
2. Understand the scope of information science and its relationship with other disciplines.
3. Discuss the advantages of protecting Intellectual Property Rights.
4. Examine the role of library professionals in Knowledge Management.

- UNIT 1      Information and Communication**  
Information: Characteristics, Nature, Value and Uses  
Conceptual difference between data, information, knowledge and wisdom  
Communication: Channels: Formal and Informal  
Communication Models  
Communication Barriers  
Trends in scientific communication.
- UNIT 2      Information Science**  
Genesis and development; Definitions and Scope  
Information Science as a discipline and its relationship with other subjects  
Bibliometrics, Informetrics, Webometrics, Scientometrics,  
Altmetrics  
Bibliometric laws and models
- UNIT3      Library, Information and Society**  
Information Society: Genesis and Characteristics  
Intellectual Property Rights, IPR Legislations in India  
Fair use provision in Copyright  
Censorship  
Right to Information Act, Information Technology Act  
National policy of information  
Open access movement
- UNIT4      Economics of Information**  
Information industry  
Cost analysis: Cost Effectiveness Analysis, Cost Benefit Analysis  
Information audit  
Marketing of information services and products  
Knowledge management: Types of Knowledge, Relation with Information management, Knowledge management procedures.  
Role of library professionals in knowledge management

## **UNIT 5      Sociology of Information**

User studies

Methods of data collection

Patterns of user behaviour

Information behaviour models

### **Reading list**

1. Andal, N. Communication theories and models. Mumbai: Himalaya Publishing House, 2005.
2. Bawden, David and Robinson, Lyn. Introduction to Information Science. London: Facet Publishing, 2012.
3. Case, Donald O. Looking for information: a survey of research on information seeking, needs and behaviour. 2<sup>nd</sup> ed. Amsterdam: Academic Press, 2007.
4. Feather, John. The information society: a study of continuity and change. 5<sup>th</sup> ed. London: Facet Publishing, 2008.
5. McGarry, K. J. Changing context of information: an introductory analysis. 2<sup>nd</sup> ed. London: Library Association, 1993.
6. McGarry, K. J. Communication, Knowledge and librarian. London: Clive Bingley, 1975.
7. McQuail, Denis and Windahl, Sven. Communication models for the study of mass communications. London: Longman, 1981.
8. Meadows, A. J., ed. Knowledge and communication: essays on the information chain. London: Library Association, 1991.
9. Norton, Melanie J. Introductory concepts in Information Science. New Jersey: Information Today, 2008.
10. Vickery, Brian C. and Vickery, Alina. Information Science in theory and practice. 3<sup>rd</sup>ed. Munchen: K. G. Saur, 2004.

# **LS1 C04 KNOWLEDGE ORGANIZATION – LIBRARY CLASSIFICATION (THEORY) (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Understand the concept of library classification
2. Create skills in organisation and dissemination of knowledge presented in different forms of documents including digital documents.
3. Develop and sharpen student's ability to classify documents using different classification schemes.

## **UNIT 1            Library Classification**

Concept, meaning, definition, need and functions

Normative principles of classification

Canons of library classification

Principles of helpful sequence

## **UNIT 2            Notation**

Notation, need, qualities and types

Hospitality in array and chain - different devices used

Mnemonics - types and functions

Class number, book number and collection number

## **UNIT 3            Facet Analysis and Fundamental Categories**

Concept of facet analysis

Ranganathan's five fundamental categories

Postulates of facet analysis and facet sequence

Principles of facet sequence

Common Isolates

Phase Relation

Devices in Library Classification



#### **UNIT 4      Library Classification Schemes**

Enumerative and faceted schemes

Salient features of DDC, UDC and CC

Current Trends in Library Classification, Web Dewey

#### **UNIT 5      Universe of Knowledge**

Different types of subjects - simple, compound, complex subjects

Modes of formation and development of subjects

#### **Reading List**

1. Foskett, A. C. Subject approach to information. 5<sup>th</sup> ed. London: Library Association, 1996.
2. Husain, Shabhat. Library Classification: Facets and Analyses. Delhi: B.R. Publishing Corporation, 2004.
3. Kaula, P. N. A treatise on colon classification. New Delhi: Sterling Publishers, 1985.
4. Krishan, Kumar. Theory of Classification. 4<sup>th</sup> rev. ed. Delhi: Vikas Pub. House, 1998.
5. Ranganathan, S. R. 1962. Elements of Library Classification. 3rd ed. Bombay: Asia Publishing, 1962.
6. Ranganathan, S. R. Prolegomena to Library Classification. 3<sup>rd</sup> ed. Bangalore: SRELS, 1989
7. Satija, M. P. Colon Classification. 7th edition. New Delhi: Sterling, 1993.
8. Satija, M. P. The theory and practice of the Dewey Decimal Classification System. Oxford: Chandos Publishing, 2007.
9. Nath, M. Universe of knowledge and development of subjects. Jaipur: Pointer, 2008.
10. Rajendra Kumbhar. Library Classification: Trends in the 21st Century. UK: Chandos, 2009.
11. SAYERS (W C B). Manual of classification for librarians. Rev. by Arthur Maltby. Ed. 5. 1975. Andre Deutsch, London.
12. SAYERS (W C B). Introduction to library classification. Rev. by Arthur Maltby. Ed. 9. 1958. Grafton, London.

## **LS1 C05 KNOWLEDGE ORGANIZATION – LIBRARY CLASSIFICATION (PRACTICAL) (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Create skills in organisation and dissemination of knowledge presented in different forms of documents including digital documents.
2. Develop and sharpen student's ability to classify documents using different classification schemes

Classification of simple, compound and complex subject books and periodicals according to 23<sup>rd</sup> edition of DDC and 6<sup>th</sup> edition of CC.

**Record of Term Work:** Classification of not less than 75 documents, of simple and complicated specific subjects using DDC and CC. Book Numbers have to be derived using the Facet Formula prescribed in CC.

## **SEMESTER II**

### **LS2 C01 INFORMATION SOURCES AND SERVICES (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Understand the various sources of print and digital information
2. Understand and evaluate various information sources and services

- UNIT1      Physical Media of information**  
Evolution of physical media  
Classification of information sources – Print and non-print, Documentary and Non-Documentary  
Primary, Secondary and Tertiary Sources of Information: their categories and characteristics.
- UNIT 2      Ready Reference Sources: Print and Digital**  
Criteria for the evaluation of reference sources  
Detailed Study of dictionaries, encyclopedias, yearbooks, directories, handbooks and manuals, biographical sources, geographical sources, statistical sources, sources of current information.  
E-resources: E-books, E-journals, ETDs, Databases, Subject Gateways, Open Access Resources
- UNIT 3      Information Users and their Information Needs**  
Categories of information users; Information needs, definition, types and models  
Information seeking behaviour  
User studies: Methods, technique and evaluation  
Role of Reference Librarian and Information Officer in Electronic Environment
- UNIT 4      Information Services**  
Reference service: Types and steps, Reference interview, Virtual Reference Service, Referral service  
Other services: CAS, SDI, Document Delivery, Abstracting and Indexing services; Translation, Reprography
- UNIT 5      Project**  
Evaluation of reference sources and web sources  
Evaluation of not less than 25 print reference sources and 25 electronic sources of different kinds

### **Reading list**

1. Bopp, Richard E. and Smith, Linda C. Reference and information services: An introduction, 4<sup>th</sup>ed. Libraries Unlimited, 2011.

2. Cassel, Kay Ann and Hiremath, Uma. Reference and information services: An introduction, 3<sup>rd</sup>ed. London: Facet Publishing, 2013.
3. Gurdev Singh. Information Sources, Services and Systems. New Delhi: PHI Learning, 2013
4. Hurt, C. D. Information Sources in Science and Technology. 3<sup>rd</sup> ed. Westport, Conn.: a. Libraries Unlimited, 1998. 6. Katz, William A. Introduction to reference work, 7<sup>th</sup>ed. New York: McGraw Hill, 1997.
5. Krishan Kumar. Reference service, 5<sup>th</sup>ed. New Delhi: Vikas Publishing House, 2004.
6. Ranganathan, S. R. Reference Service. 2<sup>nd</sup> ed. Bombay: Asia Pub. House, 1961.
7. Sewa Singh. Manual of reference and information sources. New Delhi: B R. Publishing, 2004.
8. Stebbins, Leslie, F. Student guide to research in the digital age: how to locate and evaluate information sources. Santa Barbara: Libraries Unlimited, 2005
9. Webb, William H. et al. Sources of information with social sciences. 3<sup>rd</sup> ed. Chicago: a. ALA, 1986. 10. G Devarajan and Joseph Kurien, Information Access, Tools, Services and Systems, Ess Ess publications, 2011.

## **LS2 C02 KNOWLEDGE ORGANIZATION – LIBRARY CATALOGUING (THEORY) (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Understand the organization and dissemination of knowledge presented in different forms of documents including digital documents.
2. Develop and sharpen student's ability for cataloguing using latest tools.
3. Develop knowledge in bibliographic record creation and data exchange between national and international organizations.

## **UNIT 1      Library Catalogue**

Library Catalogue – Meaning, definition, objectives and functions

Types of library catalogue: Author catalogue and Title catalogue; Dictionary catalogue and Classified catalogue

Physical forms of Library Catalogue: Book form, Card form, OPAC, Web OPAC

Inner forms of Library Catalogue - Alphabetical, Classified and Alphabetic-Classified

## **UNIT 2      Catalogue Codes: Entry Formats and Kinds of Entries**

Entry format: AACR2, CCC

Types of entries according to AACR2 - Main entry, Added entries, Analytical entries and Reference entries - Format and structure

Types of entries according to CCC - Main entry, Cross Reference entry, Class Index entry, Book Index entry and Cross Reference Index entry - Structure and format

Filing of entries in alphabetical and classified order - Word by word arrangement – Letter by letter arrangement- ALA filing rules

## **UNIT 3      Choice and Rendering of Names**

Choice and rendering of headings: Personal names, Pseudonym and Corporate bodies as per CCC and AACR2, ISBD, RDA

## **UNIT 4      Subject Cataloguing**

Subject Catalogue - Subject entries in AACR2 and CCC

List of Subject headings - LC List of Subject Headings and Sears List of Subject Headings

Verbal Indexing Languages: Chain Indexing, Pre-coordinate and Post coordinate indexing

## UNIT 5

### Centralized and Cooperative Cataloguing

Centralized catalogue services - Card service, MARC service, Bibliographic service, CIP, CIS and Prenatal cataloguing

Cooperative cataloguing programmes - NPAC, Union Catalogue

#### Reading list

1. Aswal, R. S. MARC - 21: Cataloguing format for 21st century. New Delhi: Ess Ess Publications, 2004
2. Bowman J. H. Essential cataloguing. London: Facet Publishing, 2003
3. Foulonneu, M. Metadata for Digital Resources. Oxford, UK: Chandos, 2008.
4. Girja Kumar and Krishan Kumar. Theory of cataloguing. Rev. Ed.5. New Delhi: South Asia Books, 1983.
5. Read, J. Cataloguing without tears: managing knowledge in the information society. Oxford: Chandos Publishing, 2003.
6. Sangma, S. K. AACR 2 with MARC 21: Cataloguing Practice. New Delhi: Centrum Press, 2012
7. Sangma S. K. Cataloguing rules in Library science. New Delhi: Centrum Press, 2013
8. Smiraglia, R. P. Metadata: A Cataloger's Primer. USA: Haworth, 2005
9. Taylor, A. G. and Miller, David P. Wynar's introduction to cataloguing and Classification. Ed.10. London: Libraries Unlimited, 2006.

#### Codes / Standards

1. Anglo-American Cataloging Rules (most recent edition to be used)
2. Dublin Core and other relevant metadata standards for different kinds of objects / resources  
Library of Congress Subject Headings
3. MARC 21 and related standards for bibliographic records
4. OCLC. 2002. Bibliographic formats and standards. 3rd ed. Dublin, Ohio: OCLC (Also available online at <http://www.oclc.org/oclc/bib/toc.htm>)
5. Ranganathan, S. R. Classified Catalogue Code, etc. 5<sup>th</sup> ed. Bangalore: SRELS, 1964 MARC 21 and related standards for bibliographic records
6. Sears List of Subject Headings, 21<sup>st</sup>ed.

## **LS2 C03 KNOWLEDGE ORGANIZATION – LIBRARY CATALOGUING (PRACTICAL) (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Create skills in organisation and dissemination of knowledge presented in different forms of documents including digital documents.
2. Develop and sharpen student's ability for cataloguing using latest tools.
3. Develop knowledge in bibliographic record creation and data exchange between national and international organizations.
4. Create competency in handling traditional and web-based retrieval systems and application of natural language processing in the information retrieval process.

### **Cataloguing of books and non-book materials according to AACR-2R and CCC 5**

**Unit 1** Cataloguing of single authored and joint authored books.

**Unit 2** Cataloguing of edited books, multi volume books, and pseudonymous authors.

**Unit 3** Cataloguing of uniform titles and serial publications.

**Unit 4** Cataloguing of works of corporate authors: Govt. publications, institutional publications, society publications, conference/ seminar proceedings, workshop materials.

**Unit 5** Cataloguing of non book materials: cartographic materials, films, CDs/DVDs.

**Record of Term Work:** Preparation of a Catalogue record of not less than 50 documents prepared in the card form.

# **LS2 C04 INFORMATION TECHNOLOGY APPLICATIONS IN LIS (THEORY) (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Understand the need for Library Automation
2. Understand various digital library technologies and its creation
3. Understand various modern technologies in libraries

## **UNIT 1 Library Automation**

Need for library automation

Planning and implementation

Areas of library automation

Automation of library housekeeping operations

Integrated library management systems: KOHA, SOUL, e-Granthalaya

Criteria for evaluation of library management systems

## **UNIT 2 Digital Libraries**

Digital library - Definition, scope and characteristics

Digital library initiatives - Major initiatives in the world and in India

Digital library technologies- Digital representation and compression Identification of, accessing, processing, storage, delivery and use of digital resources

Digital library creation – prerequisites, content development, metadata development, and search options

Open source digital library software - GSDL



### **UNIT3 Institutional Repositories**

Institutional repositories-concepts and characteristics

Design and architecture of institutional repositories

Contents and standards of institutional repositories

Institutional repository software – DSpace, E-Prints, Fedora

ROAR, DOAR, SHERPA-ROMEO

### **UNIT 4 Internet in Libraries**

Application of the Internet in libraries

Web based resources and services

Library 2.0/3.0

Library websites / portals-design and development

Library networks, library consortia, Web OPAC

### **Modern Technologies in Libraries**

### **UNIT 5**

RFID- Characteristics, features, components and functioning

Cloud Computing Applications

Artificial Intelligence, Robotics

Augmented Reality, Virtual Reality

Internet of Things

Ontology

### **Reading list**

1. Arthur, Lowell Jay and Burns, Ted. Unix Shell Programming. New Delhi: Galgotia, 1995.
2. Date, C. and Darwen, H. A Guide to the SQL Standard. 3rd ed. Reading, MA: Addison- Wesley, 1994.

3. Date, C.J. An Introduction to Database Systems. 7th ed. Boston, MA, USA: Addison-Wesley Longman, 2000.
4. Elmasri, Ramez and Navathe, Shamakant B. Fundamentals of Database Systems. 5<sup>th</sup> ed. Boston: Pearson/Addison Wesley, 2007.
5. Matthew, Neil et al. Professional Linux Programming. Mumbai: SPD, 2001.
6. Rowley, Jennifer. The electronic library. London: Library Association Publishing, 1998.
7. Michael, Randal K. Mastering UNIX Shell Scripting. Canada: Robert Ispen, 2003.
8. Peterson, Richard. Linux: the Complete Reference. New York: McGraw-Hill, 2006
9. Ravichandra Rao. Library automation. New Delhi: Wiley Eastern, 1990.
10. Williams, Brian K. and Sawyer, Stacey C. Using information technology: A practical introduction to computers & communications, 11<sup>th</sup> ed. McGraw-Hill, 2014.

## **LS2 C05 INFORMATION TECHNOLOGY (PRACTICAL)**

### **(4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Get proficiency in the different operating systems
2. Aware of different internet tools and technologies
3. Understand different office applications.

<b>UNIT 1</b>	Operating system – Windows, Linux
<b>UNIT 2</b>	MS Word, MS Excel, Powerpoint, MS Access
<b>UNIT 3</b>	Internet tools and technologies

## **LS2 C06 INTERNSHIP (2 CREDITS)**

Department of Library and Information Science in Rajagiri College of Social Science is providing 20 days of hands-on training for students in every year at reputed institutions. This practical experience will help them a great deal when they will found themselves in the Library and Information Science profession.

Students have to do the internship in a library approved by the department council during the summer holidays between second and third semesters. The marks have to be awarded based on the performance appraisal report of the librarian of the library where the students have undergone internship and a viva conducted by the department council after the internship. If any student fails to fulfil this requirement, his/ her result will be withheld until the Internship requirement is met.

Apart from this, the students will have to undergo one study tour to visit the most important libraries and information centres across the country. A report of the tour has to be prepared by all students.

## **SEMESTER III**

### **LS3 C01 INFORMATION PROCESSING AND RETRIEVAL (THEORY) (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Create skills in organization of knowledge presented in different forms of documents using Various Classification Schemes.

#### **UNIT 1 Bibliographic Record Formats**

ISO 2709, Z39.50, MARC, MARC 21, UNIMARC, CCF, ISBD

Metadata Formats - FRBR, Dublin Core

#### **UNIT 2 Subject Indexing**

Pre-coordinate indexing systems - PRECIS, POPSI

Post-Coordinate indexing - Thesaurus, Uniterm indexing, Keyword Indexing,

Citation Indexing, Automatic Indexing

### **UNIT 3 Web-based Information Retrieval Systems**

Web-based Information Retrieval

Web search through general search engines, search engines for scholarly literature, Metasearch engines, web indexes

Advanced search techniques: Keyword search, Boolean operators, Proximity search, Phrase search, Field searching, Concept searching, Wild Card search , Truncation, Searching of databases

### **UNIT 4 Information Retrieval Systems**

Information Retrieval Systems - Purpose, Functions and Components

IR Models: Boolean, Probabilistic Model, Vector Processing Models, Bayesian network model, Structured Text Retrieval Models.

Evaluation of Information Retrieval Systems - ASLIB Cranfield study, MEDLARS study, TREC Experiment

### **UNIT 5 Natural Language Processing**

Application of NLP in information Retrieval Systems

#### **Reading list**

1. Baeza –Yates, Ricardo. Modern information retrieval. Delhi: Pearson Education,1999.
2. Choudhury, G. G. and Choudhury, Sudatta. Organizing information from the shelf to the web. London: Facet Publishing, 2007.
3. Choudhury, G. G. Introduction to modern information retrieval. 3<sup>rd</sup> ed. London: Facet Publishing, 2010.

4. Date, C J. An Introduction to database systems. Reading, MA: Addison-Wesley, 2000
5. Korfhage, Robert R. 1997. Information storage and retrieval. New York: Wiley, 1997.
6. Kumar, P S G. Knowledge organization, Information processing and retrieval theory. B. R. Publishing Corporation, 2003.
7. Kumar, P S G. Knowledge organization, Information processing and retrieval practice. B. R. Publishing Corporation, 2003.
8. Neelameghan, A. Online database searching and retrieval: Strategies, procedures, commands and problems – A brief guide. Bangalore: SRELS, 1995.
9. Sharma, C. K. and Sharma, A. K. Information process and retrieval. Atlantic Publishers, 2007.

### **LS3 C02 RESEARCH METHODOLOGY (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Apply methodological theory to critically evaluate existing research in academic, industry and related research.
2. Explore ethical aspects of research and apply (defend, recommend and implement) ethical principles to the conduct of scholarly research.
3. Plan, design and conduct scholarly research.
4. Differentiate different research methodologies and strategies in research and identify their limitations and implications.

5. Engage in Library science research in India – research report writing; citation and reference management tools; best practice for avoiding plagiarism.

### **UNIT 1 Research**

Concept, meaning and need of research

Research process

Types of research-fundamental, applied including Inter-disciplinary and multi-disciplinary approach

Ethical aspects of research

### **UNIT 2 Research Design**

Types of research design

Identification and formulation of research problem

Hypothesis: Formulation and testing

Literature search: print, non-print and electronic sources

Review of related literature

### **UNIT 3 Research Methods**

Scientific method, Historical method, Descriptive method,

Survey method, Case study method, Experimental method,

Delphi method, Brainstorming method.

### **UNIT 4 Research Techniques and Tools**

Questionnaire, Interview, Observation

Scales and scaling techniques

Online research tools

Sample and sampling techniques

### **UNIT 5 Data Analysis, Interpretation and Report Writing**

Processing data: Editing, coding and analyzing data

Descriptive and inferential data analysis

Presentation of data- tables and graphs

Techniques of data analysis: SPSS

Structure, style and contents of research report: Style manuals-MLA and APA

E-citation and reference management tools – Zotero, EndNote and Mendeley

Current trends in Library and Information Science research in India

### **Reading list**

1. Alvesson, M. and Skoldberg, K. Reflexive methodology: new vistas in qualitative research. Ed. 2. London: Sage Publication, 2009.
2. Busha, Charles T. and Harter, Stephen. P. Research methods in librarianship. New York: Academic Press, 1980.
3. Greenfield, T. Research methods: guidance for postgraduates. London: Hodder Arnold, 1996.
4. Kothari, C. R. Research methodology. New Delhi: New Age International, 2011.
5. Krishan Kumar. Research methods in Library and Information Science. Rev. Ed. 1999. New Delhi: Har-Anand Publications, 1999.
6. Kumar, P S G. Research methods and statistical techniques. New Delhi: B. R. Publications, 2004.
7. Lancaster, F. W. and Powell, R. R. Basic research methods for librarians. New Jersey: Ablex Publishing, 1995.
8. Martyn, John and Lancaster, F. Wilfrid. Investigative methods in library and Information Science: an introduction. Arlington, Virginia: Information Resources Press, 1981.
9. Powell, R. R. and Silipigni, C. L. Basic research methods for librarians. Ed. 4. Westport: Libraries Unlimited, 2004.
10. Slater, M., ed. Research methods in Library and Information Studies. London: Library Association Publishing, 1990.

## **LS3 C03 -INFORMATION SYSTEMS AND PRODUCTS (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Understand the functions and roles of different Information Institutions.
2. Introduce the concept of information systems and analyse different information systems at national and international levels.
3. Learn about the planning and designing of Information systems.
4. Learn the various Information products and develop the skills of creating information products and thereby provide better Services.
5. Develop skills to provide consortia-based services.

### **UNIT 1 Libraries and Information Agencies**

History and development

Libraries, Documentation centres and Information centres

Data banks and Archives, Information analysis centres, Referral centres

Clearing houses, Translation centres and Reprographic centres

### **UNIT 2 Information System**

Definition, Characteristics and Properties of a system

Concept, Types, Characteristics and Components of Information System

Planning and designing of information system

Role of information system in technology transfer and national development

### **UNIT 3 Global Information Systems**

BIOSIS, AGRIS, INIS, INSPEC, MEDLINE, OCLC, JANET, PubMed, IEE electronic library, ACM Digital library, EBSCO, PROQUEST, Elsevier, Ingenta, Chemical Abstract Service, J-Gate, portals, wikis.



## **UNIT 4 Documentation and Information Centres and Systems in India**

NISCAIR, NASSDOC, DESIDOC, SENDOC, UGC-INFONET, INDEST

## **UNIT 5 Information Products and Services**

Concept, Definition and types

Information analysis and consolidation - Reports, Reviews, House journals, Bibliographies, Indexes, Abstracts, etc.

### **Reading list**

1. Bopp, Richard E. and Smith, Linda C. Reference and information services: An introduction, 4th ed. Libraries Unlimited, 2011.
2. Cassell,, Kay Ann and Uma Hiremath. Reference and Information Services: An introduction, 3rd ed, Chicago: ALA, 2013.
3. Gurdev Singh. Information Sources, Services and Systems. New Delhi: PHI Learning, 2013.
4. Hurt, C.D. Information Sources in Science and Technology. 3rd ed. Westport Conn.: Libraries Unlimited, 1998
5. Katz, William A. Reference and information services: A reader for the nineties. London: Scarecrow Press, 1986.
6. Krishan Kumar. Reference Service, 5th ed. New Delhi: Vikas Publishing House, 2004.
7. Rastogi, K.G. Reference services in Library Science. New Delhi: Alfa Publications, 2006.
8. Stebbins, Leslie F. Student guide to research in the digital age: how to locate and evaluate information sources. Santa Barbara: Libraries Unlimited, 2005.
9. Valecich, J. Information systems today: Managing the digital world. New Delhi: PHI, 2009.

## **LS3 C04 INFORMATION TECHNOLOGY APPLICATIONS IN LIS (Practical) (5 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. To provide the students with hands-on experience in using and in the administration of Koha, Digital Repository software and Reference Management software.
2. Provide the students with hands-on experience in website design

**Unit 1** Library automation packages – Koha

**Unit 2** Digital library/Institutional Repository software – Greenstone/ D Space

**Unit3** Library website/portal design

**Unit 4** Reference management software – Zotero/ Mendeley

## **SEMESTER IV**

### **LS4 C01 - PLANNING AND MANAGEMENT OF LIBRARY AND INFORMATION CENTRES (4 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Understand the modern concept of planning of libraries
2. Comprehend the concept of marketing and strategic planning involved in the marketing of information products and services.
3. Plan for effective resource management and bring strategic focus to the planning process.
4. Understand the role of library staff in performing in a team-leading for improved work Culture

## **UNIT 1 Planning of libraries**

Various steps in the planning of libraries: Library design.

Green library; Mobile library; Makerspaces; Digital Commons

## **UNIT 2 System Analysis and Design**

Systems study: Library system analysis

Project Management Techniques – PERT/ CPM, decision tables, data flow diagram.

## **UNIT 3 Human Resource Management**

Organizational structure

Job analysis and description, Recruitment, Selection and Induction, Training, Performance appraisal, Motivation, Group dynamics

Stress management

## **UNIT 4 Marketing Management**

Principles of Marketing Management

Marketing of information services and products.

Marketing techniques and strategy.

## **UNIT 5 Other Realms of Management**

Quality Management: TQM, Quality audit, SERVQUAL, LibQual, ISO 9000 series of standards

Crisis Management

Change Management

Space Management.

## **Reading list**

1. Bryson, Jo. Effective library and information centre management. Hampshire, U. K.: Gower, 1990.

2. Bryson, Jo. *Managing information services: A transformational approach*. 2<sup>nd</sup> ed. Aldershot, UK: Ashgate Publishing, 2006.
3. Corral, Sheila and Brewerton, Antony. *The new professionals handbook: Your guide to information services management*. London: Library Association, 1999.
4. Evans, G. Edward G. *Management techniques for librarians*. 2<sup>nd</sup>ed. New York: Academic Press, 1983.
5. Evans, G. Edward and Alire, Camila A. *Management basics for information professionals*. 3<sup>rd</sup>ed. London: Facet, 2013.
6. Khanna, J. K. *Handbook of library administration*. New Delhi: Crest Publishing House, 2001.
7. Mittal, R. L. *Library administration: Theory and Practice*. 5<sup>th</sup>ed. New Delhi: EssEss Publications, 2007.
8. Seetharama S. *Guidelines for planning and management of libraries and information centres*. Calcutta: IASLIC, 1990.
9. Stueart, Robert D. and Moran, Barbara B. *Library and Information Centre Management*. Colorado: Libraries Unlimited, 2004.
10. Walters, Suzanne. *Library Marketing That Works!* New York: Neal-Schuman, 2004.

### **LS4 C02 DISSERTATION AND VIVA VOCE (4 credits)**

Students have to carry out research on a topic approved by the department council, under the guidance of a faculty member and prepare a dissertation. They have to follow research methodology suitable to the area of interest with the approval of the supervisor. The dissertation shall be free from plagiarism. Research ethics shall be followed in every step of the work. The approved style for referencing is APA and appropriate size of the dissertation shall be 100 typed pages in A4 size paper. The students should also appear for a viva-voce. The valuation shall be jointly done by the supervisor of the project in the department and an External Expert from the approved panel, based on a well defined scheme of valuation.

# **ELECTIVES**

## **LS E01 INFORMATION SECURITY (3credits)**

Course Objectives :

On studying this course, students shall be able to:

1. Understand the need for information security in the modern world
2. Understand various types of attacks and security measures
3. Understand legal and ethical issues in information security

### **UNIT 1 Introduction**

Introduction to Information Security

Need for Information Security

IS assets – IT & Network infrastructure, Intellectual Property, Data, Reputation

Security Risk Analysis

Three Principles of Information Security - CIA

### **UNIT 2 Attacks And Vulnerabilities**

Security Breaches - DoS, DDOS, Wire Tapping, Backdoor, Rootkits, SPAM

Malicious Attacks - Bruteforce attack, Dictionary Password attack, IP spoofing, Hijacking, Social Engineering

Counter Measures - Protecting your system, Countering Malware, Protecting with Firewalls, Acceptable User Policy

### **UNIT 3 Security Technologies**

Intrusion Detection System

Encryption Definition, Digital Signature Non repudiation

RSA, PKI, Digital Certificate, Certification Authority, VPN

#### **UNIT 4 Legal And Ethical Issues**

Software Licences

Information Security Policy

IS Standards – ISO/IEC 27001

Cyber Laws in India – Objective and Scope of IT Act 2000

### **LS E02- DATA SCIENCE (3 credits)**

Course Objectives:

On studying this course, students shall be able to:

1. Understand the concept of data science and its interrelationship with other disciplines
2. Apply the various facets of data science in library environment

**UNIT 1:** Genesis and Development of Data Science.

Scope, Data Science as a discipline, Interrelationship with other disciplines

**UNIT 2:** Application of Data Science

Data Science Life cycle

Statistics and Exploratory data analysis

**UNIT 3:** Machine learning

Deep learning

Big data and SQL

**UNIT 4:** Data Analysis and Visualization

Research and development on data Science

## **LS E03 – INFORMATION LITERACY (3 credits)**

Course objectives:

On studying this course, students shall be able to:

1. Students will have the ability to comprehend and apply IL skills to their academic tasks.
2. Students will gain knowledge of the different IL standards and assessment tools.
3. Students will understand the most effective way to conduct information searches.

### **UNIT 1 Introduction to Information Literacy**

Information: Characteristics of information;

Types of information; Need for Information Literacy;

Dimensions of information literacy

Information literacy models; Information Literacy Standards Information literacy Assessment Tools

### **UNIT 2: Approaches of Information Literacy**

Digital literacy, Digital divide and information literacy, Media literacy, computer literacy.

### **UNIT 3: Information Literacy and Libraries**

Information literacy and types of libraries, Resource literacy, Research literacy.

### **UNIT 4: Information Literacy Policies**

International and national initiatives, Policies and guidelines IFLA, ALA,

UNESCO, Information literacy skills and best practices.

## **LS E04- DIGITAL RESOURCES (3 credits)**

Course objectives:

On studying this course, students shall be able to:

1. Understand various digital resources in academics
2. Understand the management of digital resources in the library field
3. Understand the digital resource initiatives in India

### **UNIT 1 Introduction to Digital Resources**

Digital resources: Definition, characteristics, scope and challenges

Variety of digital resources: E-books, e-journals, Databases, Electronic Theses and Dissertations, Subject gateways, Multimedia, Geospatial e-resources

### **UNIT 2 Electronic Resources: Collection Development**

Selection tools

Licensing and negotiating

Digital Rights Management

Issues in library provision

Open digital resources

### **UNIT 3 Electronic Resources Management**

Electronic resources life cycle

ERAMS – A 2 Z lists, Open URL, Link resolvers, Federated search services, Web discovery services

Marketing strategies for the digital resources in the library Innovative library services using digital resources

### **UNIT 4 Digital Resources Initiatives in India**

Initiatives for the production, storage and dissemination of digital information:

Library consortia: INDEST, UGC INFONET, DAE, FORSA

Scholarly Journals: Indian Academy of Sciences, INSA, MedIND,

IndianJournals.com

ETDs: ETDs of IITs, IISc. Vidyanidhi, ShodhGanga,

Digital Libraries and Institutional repositories: Digital Library of India,

EPrints@iisc, Librarian's Digital Library

Online Courseware: NPTEL, e-PG-Pathshala, SWAYAM



## **LS E05- INFORMATION PROCESSING AND RETRIEVAL (PRACTICAL) (3 credits)**

Course objectives:

On studying this course, students shall be able to:

1. Create skills in organization of knowledge presented in different forms of documents using UDC (Universal Decimal Classification)

### **UNIT 1 Classification of Complex Subjects**

Classification of Simple, Compound and Complex subjects according to UDC (Abridged edition 1961) and fascicules

**Record of Term Work:** Classification of not less than 75 documents, of simple and complicated specific subjects using UDC.

## **LS E06- STATISTICAL METHODS (3 credits)**

Course objectives:

On studying this course, students shall be able to:

1. Provide an understanding of statistical concepts to include measurements of dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, correlation analysis, multiple regression etc. for academic research.

### **UNIT I Introduction to Statistics**

Origin and meaning of Statistics- General uses, relation with other disciplines, limitations and minuses of Statistics.

Measures of central tendency- arithmetic mean, weighted arithmetic mean, median, mode, geometric mean, Harmonic mean.

Measures of dispersion - Definition and characteristics of good dispersion. Range, Quartile deviation, mean deviation, standard deviation and variance, percentiles, deciles. Relative measure of dispersion- coefficient of variation. Definition of measures of skewness and measures of kurtosis.

## **UNIT 2 Correlation and Regression**

Correlation: Karl Pearson's coefficient of correlation and its properties. Scatter diagram. Concept of rank correlation, spearman's rank correlation coefficient, repeated ranks.

Simple regression, regression equation, properties and uses.

## **UNIT 3 Probability and Probability Distribution**

Random experiment- sample space, events, types of events, classical and frequency approaches to probability, Addition theorem for two events, independence of events, conditional probability, multiplication theorem.

Random variable: Discrete and continuous random variables. Binomial, Poisson and Normal distributions (Concept and definition only), mean and variance (without derivation)

## **UNIT 4 Testing of Hypothesis**

Hypothesis testing: Types of hypotheses; testing of hypotheses: significance level, one tailed test, two tailed tests, Type I error and Type II error, Power of a test, Z test, t test, Chi square test for variance, F test, Chi square test for independence of attributes. ANOVA (One way only).

**(Note: This paper discusses the theoretical concepts in statistics applicable to Library and Information Science. Therefore, only simple problems may be discussed).**

## **LS E07- DIGITAL LIBRARIES (3 credits)**

Course objectives:

On studying this course, students shall be able to:

1. Design/ creation of digital libraries

2. Understand the digital library technologies
3. Study the management of digital resources in academic field

### **UNIT1 Digital Libraries**

Digital library - Definition, scope and characteristics

Digital library initiatives - Major initiatives in the world and in India

Design and organization of digital libraries - Architecture, Interoperability, Compatibility

User interfaces, protocols and standards

### **UNIT 2 Digital Library Technologies**

Digital representation and compression

Publication and file formats

Scanning, OCRing, editing and publishing

Network platforms, server management

### **UNIT 3 Digital Resources Management**

Digital collection - nature and scope

Scholarly communication - formats - Multimedia and Internet-related formats

Identification of, accessing, processing, storage, delivery and use of digital resources

Digital library user - assessment of user behaviour and needs

### **UNIT4 Digital Library-Creation and Use**

Digital library creation - prerequisites; content development; metadata development; and search options

Open source software – GSDL

Digital preservation and conservation - archiving

Digital information - Intellectual property issues; rights management

## **LS E08– TECHNICAL COMMUNICATION (3 credits)**

Course objectives:

On studying this course, students shall be able to:

1. Getting acquainted with different formats of communication models and communication channels.
2. Adapting to technical generic formats, technical report writing, technical presentations, technical proposal writing, general articles, research articles, and dissertations.
3. Familiarize the various formats of physical book design.
4. Effectively use the different reference styles.
5. Familiarize the different information consolidation products.

### **UNIT 1 Communication Process**

Types: Verbal, Non-verbal, Formal, Informal;

Types of writing;

Technical writing: Principles, characteristics;

Language as a medium for communication, readability; Audience Research

### **UNIT 2 Organization, Lay out and Presentation of Information**

Preparation of:

Learned papers

Popular articles

Technical reports

Project proposals

Book design and page layout.

### **UNIT3 Repackaging and Consolidation**

Preparation of: Trend reports

Reviews

State-of- the art report

Digests

Abstracts – Types, Preparation, Guidelines

### **UNIT4 Mechanics of Writing and Presentation**

Common problems in spelling, grammar, usage and punctuation

Copy editing and proof reading.

Oral Presentation Skills; Tips for effective visual aids

### **UNIT:5 Office Communication**

Report Writing : Annual Report, Daily Progress Report, Event Report, Promotion Report, Confidential Report, User Satisfaction Report

Office Writing: Notice Writing, Memo Writing, Letter Writing – Publisher, Book Seller, Binders, Users-Patrons-Clienteles

Presentation: Body language, Book review, At the time of Library Committee meeting, Staff meeting, Condolence meeting, Business meeting, Orientation,

Conference, Seminars or Workshop – Training Programme

## **LS E09- KNOWLEDGE MANAGEMENT (3 credits)**

Course objectives:

On studying this course, students shall be able to:

1. To make the students realize the importance of capturing knowledge elements and its structures application as a competitive advantage to industry.

## **UNIT 1 Knowledge Management Basics**

KM-Concepts and definition

Need for knowledge management

Types of knowledge; KM systems Knowledge creation and knowledge architecture – Nonaka's model.

## **UNIT 2 Knowledge Capture, Codification and Transfer**

Capturing tacit knowledge – methods

Knowledge codification – tools and procedures

Knowledge testing; Knowledge transfer

## **UNIT3 Knowledge Base**

Knowledge mapping

Decision trees, decision tables, frames

Knowledge works

## **UNIT 4 Knowledge Management System Tools and Portals**

Data visualization

Tools and techniques of knowledge management

Neural networks, data mining; managing knowledge workers

Knowledge management in Library and Information Centres