Department of Library & Information Science
School of Communication

M. Lib. I. Sc. Syllabus (OBE)

A. Vision

Vision Statement of the Department

Information for all. Learner Centric participative teaching and learning. Cutting-edge innovative research.

B. Mission

Mission Statements of the Department

M1	To impart high quality education in concomitant to international standards with employable skills and expertise.
M2	To integrate theoretical knowledge with practical skills and training.
M3	To inculcate excellence through high quality research and publications.
M4	To keep abreast with the new technologies in teaching and research.

C. Program Educational Objective (PEO)

After two years of successful completion of the program, the student will be able to

PEO1	Gain competencies that will allow graduates to begin successful careers in libraries and information environments.
PEO2	Understand the use of information and communication technologies including social aspects of information in providing information resources and services.
PEO3	Demonstrate knowledge of setting up a library or information centre.
PEO4	The competencies in planning and implementing information services.
PEO5	Have the capability for community and interdisciplinary collaboration, which is very much required for library and information science.
PE06	Demonstrate the values and ethics of library and information science profession.

D. Graduate Attributes for M. Lib. I. Sc. Program

- **Disciplinary Knowledge:** Content and practical knowledgewith the LIS profession
- **Communication Skills:** Possess clarity in conveying the ideas and client interaction.
- **Critical Thinking:** Capacity to apply analytical thought in the practical aspects of librarianship.
- **Problem Solving:** Participate in the problem solving with professionals and users and applying the knowledge in the day-to-day professional activities.
- **Cooperation:** Appreciate collaboration and cooperation among stakeholders of the library and information centres.
- **ICT Skills:** Selecting and integrating appropriate ICT skills for professional development.

- **Ethics:** Doing what is right to society and inculcate professional ethics.
- **Self-Directed Learning:** Developing autonomy and self-regulation in learning and professional development.
- **Reasoning:** Ability to interpret and draw the conclusion and find solutions in the professional activities with open-mindedness
- **Creativity:** Ability to produce new ideas.
- **Societal and Environmental Concern:** Performing an act or solving a problem with respect to societal and environmental concern.
- **Lifelong Learning:** Understands the need for learning and practices it throughout the professional life.

E. PEO to Mission Statement Mapping

	PEO1	PEO2	PEO3	PEO4	PEO5
M1	3	3	3	3	3
M2	3	3	3	3	3
M3	2	3	3	2	2
M4	2	3	2	3	3

E. Program Outcomes(PO)

On the successful completion of the program, the student will be able to

PO1	This programme prepares the student with professional competencies
PO2	It provides opportunities in wide spectrum of jobs in libraries, archives, publishing firms, the corporate sector, and firms associated with information products and services.
PO3	The programme helps the students to gain competencies that will allow graduates to begin successful careers in libraries and information centres.
PO4	The programme will make students understand the use of information and communication technologies including social aspects of information in providing information resources and services.

F. PO to PEO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6
PEO1	3	3	3	3	3	3
PEO2	3	3	3	1	3	3
PEO3	3	3	3	1	3	3
PEO4	3	3	3	2	3	3
PEO5	3	3	3	2	3	3

COURSE STRUCTURE FOR M. Lib. I. Sc. UNDER CBCS – 2017									
S.NO	**COURSE CODE**	**COURSE TITLE**	**SEMESTER**	**CREDITS**	**L**	**T ***	**P**	**Total**	**Marks**
1	LIS/1/CC/01	Fundamentals of Library and Information Science	I	3	2	1	0	3	100
2	LIS/1/CC/02	Information Systems and Services	I	4	3	1	0	4	100
3	LIS/1/CC/03	Personality Development and Communication Skills	I	4	3	1	0	4	100
4	LIS/1/CC/04	Management of Library & Information Centres	I	4	3	1	0	4	100
5	LIS/1/CC/05	Information Literacy	I	3	2	1	0	3	100
					13	**5**	**0**	**18**	
6	LIS/2/CC/06	Knowledge Organization – Classification (Theory)	II	3	2	1	0	3	100
7	LIS/2/CC/07	Knowledge Organization – Cataloguing and Metadata (Theory)	II	3	2	1	0	3	100
8	LIS/2/CC/08	Knowledge Organisation – Classification (Practical)	II	4	0	0	4	4	100
9	LIS/2/CC/09	Knowledge Organisation - Cataloguing and Metadata (Practical)	II	4	0	0	4	4	100
10	LIS/2/DSE/10 (Any one)	Technical Communication Community Information System	II	3	2	1	0	3	100
					6	**3**	**8**	**17**	
11	LIS/3/CC/13	Internship	III	2	0	0	2	2	100
12	LIS/3/CC/14	Introduction to ICT & Applications in Libraries (Theory and Application)	III	4	2	0	2	4	100
13	LIS/3/CC/15	Digital Library and Content Management Systems (Theory)	III	4	3	1	0	4	100
14	LIS/3/CC/16	Digital Library and Content Management Systems (Practical)	III	4	0	0	4	4	100
15	LIS/3/DSE/17 (Any one)	Knowledge Management Web Technologies Integrated Library Management System	III	3	2 2 2	1 1 1	0 0 0	3 3 3	100
16	LIS/3/DSE/18 (Any one)	Academic Library System Special Library System Public Library System	III	3	2 2 2	1 1 1	0 0 0	3 3 3	100
					8	**2**	**11**	**20**	
17	LIS/4/CC/21	Information Retrieval	IV	4	2	0	2	4	100
18	LIS/4/CC/22	Research Methods	IV	4	2	2	0	4	100
19	LIS/4/CC/23	Dissertation / Project and Viva-Voce	IV	6	0	6	0	6	100
20	LIS/4/DSE/24 (Any one)	Informetrics and Scientometrics Health Information Systems Agriculture Information Systems Industrial Information Systems	IV	3	2 2 2 2	1 1 1 1	0 0 0 0	3 3 3 3	100
					6	**9**	**2**	**17**	
								Total credits 72	
Open Electives									
21	LIS/2/OE/11	Information Sources in Science and Technology	II	3	3	0	0	3	100
22	LIS/2/OE/12	Web based Information Resources	II	3	3	0	0	3	100
23	LIS/3/OE/19	Intellectual Property Rights	III	3	3	0	0	3	100
24	LIS/3/OE/20	Electronic Publishing	III	3	3	0	0	3	100

* Tutorials may include Seminar/Colloquium presentations, Assignments, Group discussion, Debates, Field visits etc., Total No. Of Credits required to be acquired by a student: 72 credits - 60 (core courses) + 12 (Electives including Open Electives)

SEMESTER - I					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/1/CC/01	Fundamentals of Library and Information Science	2	1	-	3

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

(Course outcomes are specific for a particular course. CO should be specific, measurable,achievable, realistic, and time-bound)

a. Syllabus

Units	Content	Hrs.
I	**Libraries - Modern Concepts, Role and Types** Library & Society, Role of Libraries in Socio-economic cultural and Educational development, Information Institutions of Different kinds: Libraries, Archives, Documentation Centers, Information Analysis Centers, Museums and their respective roles and functions. Five Laws of Library Science and their Implications.	12
II	**Laws relating to Libraries and Information** Library legislation: need and essential features' Library legislation in India. Model Public Library Act and its features. Press and Registration Act. Delivery of Books and Newspapers (Public Libraries) Act. Copyright Act; Right to Information Act	12
III	**Professional Associations and Organizations** Library and Information Profession, ethics and standards. Professional Associations. National and International. Information and Documentation Organizations. Role of UNESCO, NISCAIR, DESIDOC, NASSDOC, RRRLF, UGC.	12
IV	**Knowledge Society** Characteristics and attributes of Information /Knowledge Society. Legal and Ethical Issues; Information and Knowledge as Economic Resources. Economics of Information. The digital divide. National Information Policy, National Information Infrastructure.	12
V	**Users and their needs** Types of Communication; Theories and Models of Communication; Channels– formal and informal; Information Transfer Cycle. Barriers to Communication Categories of users; information use contexts. Information seeking behavior. Theories of Information behavior: ASK hypotheses. Contributions of Belkin, Wilson, Peter Ingwersen.	12

Tasks and Assignments:
Each student is required to submit the following:

- Go to the library and observe how books are arranged in the library and how shelf rectification is done. Based on their observation, discuss things in the class.
- Prepare and submit assignment on the given topic
- Take seminar with PPTs on the assigned topic

References:

Al-Suqri, M. N. (Ed.). (2015). *Information Seeking Behavior and Technology Adoption: Theories and Trends: Theories and Trends*. IGI Global.

Baker, D. (2011). *Libraries and society: Role, social responsibility and future challenges.*Oxford.

Barua, B. P. (1992). *National Policy on Library and Information systems and services for India: Perspectives and Projections*. Popular Prakashan.

Bawden, D., & Robinson, L. (2015). *Introduction to information science*. Facet Publishing.

Mai, J. E. (2016). *Looking for information: A survey of research on information seeking, needs, and behavior*. Emerald Publishing.

Feather, J. (2013). *The information society: a study of continuity and change*. Facet publishing.

Gossen, T. (2016). *Search engines for children: search user interfaces and information-seeking behaviour*. Springer.

Lester, J., & Wllace, C. (2007). *Fundamentals of information studies: Understanding information and its environment*. Neal-Schuman Publishers, Inc.

Miller, J. B. (2014). *Internet technologies and information services*. ABC-CLIO.

Ranganathan, S. R. (1988). *The Five Laws of Library Science*. New Delhi: Sarada Ranganathan Endowment for Library Science.

Rubin, Richard. (2010). *Foundations of Library and Information Science*. Facet publishing

Ruthven, I., & Kelly, D. (Eds.). (2011). *Interactive information seeking, behaviour and retrieval*. Facet Publishing.

Tella, Adeyinka (2016) *Information Seeking Behaviour and Challenges in Digital Libraries*. IGI Global.

Totterdell, A., Gill, J., & Hornsey, A. (2005). *An introduction to library and information work*. Facet Publishing.

b. Mapping of ProgramOutcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3

CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

c. Evaluation Scheme

	CO1	**CO2**	**CO3**	**CO4**	**CO5**	**Total**
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

d. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	**CO2**	**CO3**	**CO4**	**CO5**
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

e. Mapping Course Outcome with External Assessment (60 Marks)

Category	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Part – A (Objective - 10 x 1 = 10marks)	2	2	2	2	2
Part – B (Short Answer -5 x 4 = 20marks)	10	10	-	-	-
Part – C (Essay-3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

f. Rubric for Assignments

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideasare detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported;	Content is not sound	Not attended	CO1, CO2, CO5

2	**Organiz a -tion 50%**	Includes title, introduction,statement ofthe main idea withillustration and conclusion.	Includes title, introduction,statement ofmain ideaand conclusion.	organizational tools are weak or missing	Noorganization	Not attended	CO1, CO2, CO5

g. Rubric for Seminar

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation 50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

h. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	Part – A: Marks: 5 x 2 = 10		
1	Discuss the second law of library science	Recall	Remember
2	What is referral service?	Recall	Remember
3	Distinguish between libraries and archives	Differentiate	Understand
4	'Library is a Knowledge Centre'. Explain	Examine	Analyse
5	How readers' time could be saved in a library?	Illustrate	Apply
	PART – B Short Answer The answer should not exceed 200 words arks:4 x 5 = 20		

21	Discuss essential features of a model public library Act. (or) Write a short note on Right to Information Act 2005.	Recall	Remember
22	Briefly describe the resources and services of National Library of India? (Or) Discuss the functions ofInformation Analysis Centres (IAC).	Recall	Remember
23	What is digital divide? Examine various reasons for digital divide. (Or) Discuss and compare various initiatives to bridge digital divide in India?	Compare	Understand
24	Discuss the role of Libraries in socio-economic and educational development. (Or) "Library is a Growing Organism"- Explain.	Examine	Analyse
PART – C Essay Answer The answer should not exceed 400 words Marks: 3 x 10 = 30			
25	State the objectives and describe the types of assistance provided by Raja Rammohun Roy Library Foundation towards the growth of libraries.		Remember
26	Discuss five laws of library science and their implications		Understand
27	Examine the need of public library legislation. Discuss briefly the essential features of a Model Public Library Act		Analyze
28	Define information society. Critically evaluate the status of development of India as an information society.		Evaluate
29	What is your view on importance of non-verbal communication in human life? Discuss different forms of non-verbal communication		Synthesize

SEMESTER - I					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/1/CC/04	Management of Library & Information Centres	3	1	0	4

a. Course Outcome (CO)

After completion of the course, students will be able to manage the library & information centers effectively.

	Course Outcome	Level
CO 1	Explain the basic management concepts and techniques.	Understand
CO 2	Illustrate the applications of management techniques in the library & information centres.	Apply
CO 3	Examine the various aspects of library management.	Analyze
CO 4	Formulate the practical aspects of preservation and conservation of library materials.	Create
CO 5	Assesses the outcome of the new managerial techniques in LICs.	Skill

b. Syllabus

Units	Content	Hrs.
I	**Schools of Management Thought** Classical, Neo-classical and Modern management theories; Principles of Scientific Management; Fayol's Principles; Functions of Management (POSDCORB).	16
II	**Systems Analysis and Design** Systems Theory; Open and Closed Systems; Project Management Techniques – PERT/CPM, Decision Tables; Data Flow Diagram; Quality Management (TQM, Six Sigma); Change Management, Disaster Management, SWOT Analysis.	16
III	**Resources Management** Collections, Space, Furniture and Equipment; Human Resources: Job Analysis, Job Description, Job classification, Selection and Recruitment, Performance Appraisal; Financial resources: Budgeting, Accounting, Auditing; Resource mobilisation.	16
IV	**Preservation and Conservation of Library materials: Print and Electronic** Environmental, Chemical and Biological factors affecting Library Materials;Conservation Techniques of Library Materials; Binding.	16
V	**Marketing of Library & Information Products and Services** Marketing concepts, Market Research, Marketing strategies, Marketing Mix,Market Segmentation, Marketing Plan.	16
	Tasks and Assignments: Each student is required to submit the following: Prepare a case study of marketing of information products and services a special library. Submit an assignment on a model budget of an academic library. **References:** Beard well, Ian & Holden, Len. (1996). Human Resource Management: A contemporary perspective. Longman. Bryson Jo. (1996). Effective Library and Information Management.	

	Jaico Pub. House Drucker, Peter F. (2002). Management Challenges for the 21st century. Oxford;Butterworth Heinemann. Durean, J. M. & Clements, D. W. G. (1986). Principles of the preservation of library materials. IFLA. Evans, G. Edward & Layzell, Patricia. (2007). Management Basics for Information Professionals, 2 Ed. Libraries unlimited. Harvey, Poss. (1993). Preservation in libraries: a reader. RR Bowker. Johnson, P. (2014). Fundamentals of collection development and management. American Library Association. Johnson, Peggy. (2009). Fundamentals of Collection Development and Management,.2nd Ed. ALA. Kotler, Philip (2003). Marketing Management. 11th Ed. New Delhi: Pearson. Narayana, G J. (1991). Library and Information management. Prentice Hall of India. Paton, Robert A. (2000). Change Management. Response Books. Rowley, Jennifer (2001). Information Marketing. Ashgate Publishing Limited. Stoner, James A F (et.al). (1996). Management: Global Perspectives. 10th Ed. McGraw Hill Inc. Stueart, Robert D & Moran, B. (2007). Library and Information Centre Management.7th ed. Libraries Unlimited.	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (Objective - 5 x 2 = 10 marks)	2	2	2	2	2
Part – B (Short Answer – 4 x 5= 20 marks)	10	10	-	-	-
Part – C (Essay- 3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza -tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4

2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	Model Questions	Specification	Level
	PART- A (5 x 2 =10 marks) Answer ALL Questions		
1	Unity of command	Recognize	Remember
2	Scalar chain	Recall	Remember
3	Job analysis	Recognize	Remember
4	Critical path method	Recognize	Remember
5	MBO	Recognize	Remember
	PART- B (4 x 5 = 20 marks)		
6	Marketing of information products Or SWOT Analysis.	Explain	Understand
7	Scientific management Or TQM in libraries.	Differentiate Define	Understand
8	Need for training and induction Or POSDCORB.	Cite Examples	Understand
9	Any five principles of Henry Fayol Or Book selection Principles.	Illustrate	Apply
PART- C (3 x 10 = 30 marks) Answer any THREE Questions			
10	Briefly describe the steps in HRM.	Describe	Analyse
11	What are the different periods in the history of management thoughts? Discuss the various approaches to management.	Explain Discuss	Understand
12	Define budget and budgeting. Explain the major budgeting techniques.	Assess	Skill
13	Discuss the steps in the preparation of a marketing strategy for an information centre.	Explain Discuss	Understand
14	Need and importance of preservation and conservation of library materials. Describe different binding methods used in libraries.	Describe	Analyse

SEMESTER - I					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/1/CC/02	Information Systems and Services	3	1	0	4

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

(Course outcomes are specific for a particular course. CO should be specific, measurable, achievable, realistic, and time-bound)

	Course Outcome	**Level**
CO 1	Explain about various national and international information system	Remember
CO 2	Understand the functional infrastructure of information systems and services.	Understand
CO 3	Examine various information networks and policies	Apply
CO 4	Analyze various information services and products	Analyze
CO 5	Hands on experience in search and retrieval of information from various information systems.	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	**Information Systems**: Definition, Types and Characteristics; Planning, Designing and Evaluation of Information System.	16
II	**National and International Information Systems and Services:** ENVIS, BIS, PIS; AGRIS, INIS, INSPEC, MEDLARS, OCLC, Web of Science, SCOPUS, SCIFINDER, Google Scholar, BIOSIS, ERIC.	16
III	**Information Networks and Consortia:** Resource Sharing and Networking – Objectives and Scope; Features and Characteristics of Library Networks; Data Networks – NICNET, ERNET, NKN;Library Networks: INFLIBNET, DELNET; Library Consortia: e-ShodhSindhu, NKRC (CSIR-DST).	16
IV	**Information Products and Services:** Information services, concept, definition need and trends; Reference and Referral Services, Virtual Reference Service; Alerting services – CAS, SDI; Bibliographic, Document Delivery Services; Reference Interview and search techniques; Information analysis, consolidation and repackaging	16
	Tasks and Assignments: Task 1: Attending the hands-on tutorials on selected information systems Assignment 1: Formulate a search strategy and perform a real time search and analyze the search results on a given topic using selected information systems. **References:**	

	• Bopp, R. E., & Smith, L. C. (Eds.). (2011). Reference and Information Services: An Introduction: An Introduction. ABC-CLIO. • Cassell, K. A., & Hiremath, U. (2013). Reference and information services: An introduction. American Library Association. • Chowdhury, G., & Chowdhury, S. (2001). Information sources and searching on the World Wide Web. Facet Publishing. • Ghenney, F. N. (1980). Fundamentals of Reference Sources. Mc Graw Hill. • Guha, B. (1999). Documentation and Information Services (2nd Ed.). World Press. • Rowley, J. E. (1996). The Basics of Information Systems. Facet Publishing.	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5
CO1	**3**	**3**	**3**	**3**	**2**
CO2	**3**	**3**	**3**	**3**	**3**
CO3	**3**	**3**	**3**	**3**	**3**
CO4	**2**	**2**	**1**	**3**	**1**
CO5	**1**	**1**	**1**	**1**	**2**

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A **(5 x 2 = 10 marks)**	2	2	2	2	2
Part – B **(5 x 4 = 20 marks)**	10	10	-	-	-
Part – C	-	-	10	10	10

(3 x 10 = 30 marks)					
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported;	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza-tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4

2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	Part – A (Marks: 5x 2= 10)		
1	List out major models of Library consortia	Recall	Remember
2	Name any two Indexing and Abstracting Databases	Recall	Remember
3	What is Document Delivery Service?	Recall	Remember
	PART – B (Marks:5 x 4 = 20)		
21	a) Discuss the functions of ENVIS (or) b) Discuss the major objectives of INIS	Explain	Understand
22	a) Define the concept of alerting services. (or) b) Differentiate Reference Service and Referral Service.	Differentiate/define	Understand
23	Explain major Library consortia models present in India with appropriate examples a) (or) b) Discuss about various types of Current Awareness Service with proper examples	Example	Understand
24	Illustrate the steps of Selective Dissemination of Information a) (or) b) Illustrate the major search techniques used in bibliographic databases.	Illustrate	Apply
	PART – C (Marks: 3 x 10 = 30)		
25	Describe the significance of resource sharing in Libraries.	Describe	Analyze
26	Explain major information services provided by Libraries.	Explain/discuss	Understand
27	Assess the search and information retrieval features of AGRIS	Assess	Skill

SEMESTER - I					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/1/CC/05	Information Literacy	2	1	0	3

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

	Course Outcome	**Level**
CO 1	Explain the role of nature and in the development of an individual	Understand
CO 2	Illustrate the Information Literacy development skill and	Apply

	competencies	
CO 3	Examine the information Literacy in different circumstances	Analyze
CO 4	Formulate the solutions for dissemination of information	Create
CO 5	Assesses intelligence with the help of a tool	Skill

b. Syllabus

Units	Content	Hrs.
I	**Introduction to Information Literacy** Introduction to Information Literacy Information: Characteristics of information; Types of information; Information society, Information literacy models, standards; concept of lifelong learning.	16
II	Approaches of Information Literacy Digital literacy, Digital divide, and information literacy, Media literacy, computer literacy	16
III	Unit 3: Information Literacy and Libraries Information literacy and types of libraries, Resource literacy, Research literacy.	16
IV	Unit 4: Information Literacy Policies International and national initiatives, Policies and guidelines IFLA, ALA, UNESCO, Information literacy skills and best practices.	16
V	1 IFLA models 2 Scounal Information Literacy mode1 3 Skills and competencies	16
	Tasks and Assignments: Each student is required to submit the following: ✓ Observe users how to access and evaluate the information ✓ are a case study of user disadvantages? ✓ Observe and interact with Library materials and user needs REFERENCES Association of College and Research Libraries (ACRL). (2000). Information Literacy Competency Standards for Higher Education. American Library Association. Bawden, D. (2001). Information and digital literacies: a review of concepts. Journal of doDocumentation57(2), 218-259. Bruce, Christine. (1997). The Seven Faces of Information Literacy. Auslib Press. Council of Australian University Librarians. (2001). Information Literacy Standards. Canberra Council of Australian University Librarians. Presidential Committee on Information Literacy, American Library Association. (1989). Society of College, National and University Libraries (SCONUL). (1999). Information skills in higher education: a SCONUL Position Paper. London: SCONUL. http://www.sconul.ac.uk/activities/inf_lit/papers/Seven_pillars.html Torras, M. C. & Saetre, T. P. (2009). Information Literacy Education. Oxford: Chandos Publishingi.	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (Short answers - 5 x 2 = 10 marks)	2	2	2	2	2
Part – B (Short Answer - 5 x 4 = 20 marks)	10	10	-	-	-
Part – C (Essay- 3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5

2	**Organiza-tion** **50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Knowledge and Understanding** **50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	Part – A: Short answers **5 x 2 = 10**		
1	Define Data	Recognize	Remember
2	Information Literacy	Recall	Remember
3	Digital Literacy	Recognize	Remember
4	Computer literacy	Recognize	Remember
5	National Information Policy	Recognize	Remember
	PART – B Short Answer The answer should not exceed 200 words 5 x 4 = 20		
21	a) Discuss the information literacy programs (or) b) programs the role of public Libraries in information dissemination	Explain	Understand
22	a) Differentiate: computer Literacy and Digital literacy (or)	Differentiate	Understand

	b) Define the following concepts; IFLA and SCOUNAL Information literacy model	Define	
23	a) Give two examples for Information and Knowledge (or) b) Give two examples for Acquisition of Knowledge and Process of Knowledge	Cite Examples	Understand
24	a) Illustrate key components of media literary (or) b) Illustrate value of information	Illustrate	Apply
	PART – C Essay Answer The answer should not exceed 400 words 3 x 10 = 30		
25	a) Describe the information Literacy Standards (or) b) Examine the key components of Computer Literacy	Describe	Analyze
26	a) Explain Information Characteristics (or) b) Discuss Information Literacy Life Long Learning	Explain Discuss	Understand
27	a) Assess Information Literacy programs in Academic Libraries (or) b) Assess IFLA information Literacy key components	Assess	Skill

SEMESTER - II					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/2/CC/08	Knowledge organization Classification (Practical)	0	0	4	4

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

	Course Outcome	**Level**
CO 1	Explain the role of Library Classification	Understand
CO 2	Illustrate the classification of Documents	Apply
CO 3	Examine the	Analyze
CO 4	Formulate the solutions for the organization of information	Create
CO 5	Assesses intelligence with the help of a tool	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	Scheme 1: Dewey Decimal Classification – Practical (No. of Practical hours: 30) Classification of Macro and Micro documents using specified edition of DDC.	16
II	Scheme 2: Universal Decimal Classification –Practical (No. of Practical hours: 30) Classification of Macro and Micro documents using specified edition of UDC.	16
III	DDC Tables	16
IV	Add to Instructions	16
V	UDC Auxiliary Tables	16
	Tasks and Assignments: **1.** This course focus on imparting practical training on important classification schemes.	

	2. Focus on Knowledge organization in the Libraries **3.** To apply different types of techniques in the orgnaision of library material in a systematic manner **REFERENCES** Dewey Decimal Classification and Relative Index, OCLC. Universal Decimal Classification, UDC	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (60 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	5	5	5	5	5
Seminar	-	-			-
Test	6	6	6	6	6
Attendance	1	1	1	1	1
Total	12	12	12	12	12

f. Mapping Course Outcome with External Assessment (40 Marks)

Category	CO1	CO2	CO3	CO4	CO5
4 problems As per the syllabus					
	8	8	-	-	-
	-	-	10	10	10
Total	**8**	**8**	**8**	**8**	**8**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs

1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza -tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation 50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**

M.Lib.I.Sc. DEGREE EXAMINATIONS 2022

(TWO-YEAR PROGRAMME)

(LIBRARY AND INFORMATION SCIENCE)

SECOND SEMESTER

LIS/2/CC/08: Knowledge Organization – Classification (Practical)

Max. Marks: 40 Duration: 3 hrs.

Part - A

Dewey Decimal Classification (23rd Edition)

Classify any FIVE titles

(5x4=20 Marks)

(*All questions carry equal marks*)

==========

1. Introduction to aptitude test
2. Encyclopaedia of Public Administration
3. Tamil Essay in 20th Century
4. English – Hindi Dictionary
5. Collection development in Public libraries
6. Treatment for Lung Cancer
7. Social Status of Indians in the USA

Part B

Universal Decimal Classification (Standard Edition)

Classify any FIVE titles

(5x4=20 Marks)

(*All questions carry equal marks*)

==========

1. Knowledge, Logic, and Law
2. Viruses
3. Journal of History in Germen language
4. Apartheid South Africa
5. UK Joint Academic Network (JNET)
6. Traffic during Rush hours in Bombay
7. Mental hygiene of gifted children's

SEMESTER - II					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/2/CC/09	Knowledge organization Cataloguing and Metadata (Practical)	0	0	4	4

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

	Course Outcome	**Level**
CO 1	Explain the role of Cataloguing	Understand
CO 2	Illustrate the different types of Cataloging	Apply
CO 3	Examine the Information retrieval techniques	Analyze
CO 4	Formulate the solutions for the dissemination of information	Create
CO 5	Assesses intelligence with the help of a cataloguing tool	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	Introduction to AACR2$_R$	16
II	Single author, Two three author works	16

III	More than three authors' works, Multivolume books	16
IV	Corporate bodies, seminars, conferences congress, Serial Publicities	16
V	MARC 21 formats	16
	Tasks and Assignments: ❖ To study Information Retrieval techniques ❖ Focus on information Search Techniques ❖ Information Evaluation method and techniques REFERENCES American Library Association. (1978). Anglo-American Cataloguing Rules. ALA Sears, M. E. (2010). Sears List of Subject Headings. 20th Ed. H. W. Wilson. **AACR2R (Anglo American Cataloguing Rules)**	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (60 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	5	5	5	5	5
Seminar	-	-	2	2	-
Test	6	6	6	6	6
Attendance	1	1	1	1	1
Total	12	12	12	12	12

f. Mapping Course Outcome with External Assessment (40 Marks)

Category	CO1	CO2	CO3	CO4	CO5
4 problems As per the syllabus					
	8	8	-	-	-
	-	-	8	8	8
Total	**8**	**8**		**8**	**8**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza -tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation 50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	Model Questions	Specification	Level

Aug 2022 **[Batch 2021-23]**
Name of the Candidate :
Registration Number :

M.Lib.I.Sc. Degree Examinations, 2022
TWO YEAR MASTER'S DEGREE PROGRAMME - CBCS
Library and Information Science
Second Semester
LIS /2/CC/ 09 Knowledge Organisation Cataloguing and Metadata-Practical

Duration: 3 Hours **Max. Marks: 40.**

Prepare Cataloguing entries According to AACR2R
Answer any FOUR of the following/
All Questions carry equal Marks

Problem-1 **Prolegomena Library Classification**
By
S.R. Ranganathan
3rd edition
Asia Publishing House
Madras
2021

Other information: Call No. 025.24 SRR Pages: viii, 569 Acc. NO. 3636
ISBN: 978-82-8416-354-8
This book is useful to Library and Information Science Students

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Problem -2 **Text Book of Chemistry: An introduction to organic theory**
By
W.S. Anderson
F.W. watson
3rd Rev. Ed.
Asian Publication
Madras
2018

Other Information: Call No.540 WSA, Pages: iiv, 293, Size: 25x26 cm.
Acc.No.2034 ISBN 0-04-321121-1432
Organic chemistry series no; 29. This book is useful to P.G. students

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Problem: 3

INTRODUCTION TO FINANCIAL ECONOMICS: During Lock Down Period

By
V.S.Pillai
K.S. Pillai
G.S Pillai
And
A.H. Pillai
3rd edition
Himalaya Publishing house
Thiruvanthapuram
2016

Other Information: Call No.330 VSP; Pages: xi, 567, coloured Size: 21x24 cm. Acc.No.5123 ISBN 0-05-321342-1424 Lockdown series no.2; edited by Neelameghan, A.S. ; This book is specifically designed for financial economists

Problem: 4 **A CLERGYMAN'S DAUGHTER**
BY George Orwell
1st Ed., London,
Seeker and Warburg Publishers, C19 60.

Other Information: Call No.823.9, N60; Pages: vii, 470p, Size: 27x21 Cm.
Acc.No.986; ISBN: 978-84-8381-648-3
Note: The real name of the George Orwell is ERIC BLAIR

Problem: 5 **A Report on National Library Advisory Committee**
Prepared By
Ministry of Cultural Affairs
Government of India
Published by
Department of Cultural Affairs
New Delhi
2016

Other Information: Call No.020.0202 CAF Pages: iiiv 456, Size: 23x24 cm. Acc.No.789 Committee report chairman: A.K.Sinha useful to Librarians in India

Problem-6

JOURNAL OF THE INSTITUTE OF Environmental studies in Tamil Nadu
Environmental Studies
Volume 35 (no) December 1994
Asia Publishing House
MADRAS

Other Information Call.no Xm4418 The Library has all the volumes

In 2007 there was a change title and sponsoring body. There new tile was 'Journal of Economic Growth and Development. The volume numbering was again started from volume1 with Class number Xm44

SEMESTER - II					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/2/CC/07	Knowledge Organization – Cataloguing and Metadata (Theory)	2	1	0	3

a. Course Outcome (CO)

After completion of the course, students will understand the basic concept and philosophies of library cataloguing, rules of filing entries and subject headings in cataloguing and different bibliographic standards.

	Course Outcome	**Level**
CO 1	Explain the basic concepts and philosophies of library cataloguing.	Understand
CO 2	Illustrate the rules of filing entries and subject headings in cataloguing	Apply
CO 3	Examine the different bibliographic standards.	Analyze
CO 4	Formulate the rules of choice of headings and rendering the names.	Create
CO 5	Assesses the ability of the students to generate card cataloguing using AACR II.	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	**Bibliographic Records** Bibliographic Entities and Bibliographic Records; Bibliographic files of different kinds, Bibliographic Objectives.	16
II	**Content Description rules and subject headings** Indexing languages, controlled vocabularies, rules for choice of heading, rendering of names, subject heading lists.	16
III	**Rules for Bibliographic Description** Principles of Description; FRBR; Standards for Description: ISBD, AACR-2, RDA; Standards for Machine Readable Bibliographic Records – ISO2709 and the MARC family of Formats, MARC- XML.	16
IV	**Metadata** Types of Metadata; Metadata Standards: Dublin Core, Encoded Archival Description (EAD).	16
	Tasks and Assignments: Each student is required to submit the following: ✓ Prepare card catalogue for joint authors and cooperate bodies in AACR format. ✓ Observe and visit libraries which follows AACR II catalogue and practice how to use it for locating a document	

	✓ Survey the problems of using card catalogue in the university library. **References:** • American Library Association. (1978). Anglo-American cataloguing rules. 2nd Ed. 2002 revision, 2005 update. American Library Association. • Andrew, P. G. (2003). Cataloguing Sheet Maps. Haworth Press. • Bowman, J. H. (2002). Essential cataloguing the basics. Facet Publishing • Broughton, Vanda. (2006). Essential Thesaurus Construction. Facet. • Broughton, Vanda. (2011).Essential Library of Congress Subject Headings. Facet • Dhawan, K. S. (1997). Online Cataloguing Systems. Commonwealth Publication. • Dhiman, Anil K. (2004). Cataloguing of Non-book Materials. Ess Ess. • Girija Kumar & Krishan Kumar. (2004). Theory of Cataloguing. New Delhi: Vikas • Gredley, Ellen & Hopkinson, Alan (1990). Exchanging Bibliographic Data: marc and other International Formats. ALA. • Hagler, Ronald & Simmons, Peter. (1991). The Bibliographic Record and Information. ALA. • Haynes, David. (2017). Metadata for Information Management and Retrieval, Understandingmetadata and its use . Facet. • Khan, M. T. M. (2005). Anglo-American cataloguing rules. Shree Publishers. • Krishan Kumar. (1986). An Introduction to Cataloguing Practice. 3rd Rev. Ed. New VikasPublishing. • Mitchell, Anne M. & Surratt, Brian E. (2005). Cataloguing and Organizing Digital Sources.Facet Publishing. • Mitchell, Anne M. & Surratt, Brian E. (2005). Cataloguing and Organizing Digital Sources.Facet. • Ranganathan, S. R. (1988). Classified Catalogue Code with additional rules for dictionary catalogue. Sarada Ranganathan Endowment for Library Science. • Roe, Sandra K (2002). The Audio Visual Cataloguing. Haworth Press. • Sears, M. E. (2010). Sears List of Subject Headings. 20th Ed. H. W. Wilson. • Taylor, A. G. (2007). Introduction to Cataloguing and Classification . 10th Ed. Atlantic. • Welsh, Anne & Batley, Sue. (2012). Practical Cataloguing AACR, RDA and MARC21. Facet Publishing	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3

CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	**CO2**	**CO3**	**CO4**	**CO5**	**Total**
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	**CO2**	**CO3**	**CO4**	**CO5**
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Part – A (Objective - 5 x 2 = 10 marks)	2	2	2	2	2
Part – B (Short Answer - 5 x 4 = 20 marks)	10	10	-	-	-
Part – C (Essay- 3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5

2	**Organiza-tion** **50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Knowledge and Understanding** **50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	PART- A (5 x 2 =10 marks) Answer ALL Questions		
1	Ranganathan's principles.	Recognize	Remember
2	RDA	Recall	Remember
3	Thesaurus	Recognize	Remember
4	Scalar chain	Recognize	Remember
5	PRECIS	Recognize	Remember
	PART- B (4 x 5 = 20 marks)		
6	a) Bibliographic Control OR b) Metadata	Explain	Understand
7	a) Indexing languages OR b) Subject Heading Lists	Differentiate Define	Understand

8	What are the objectives of ISBD (G) OR b) MARC-II	Cite Examples	Understand
9	Rules for choice of heading OR b) FRBR	Illustrate	Apply
PART- C (3 x 10 = 30 marks) Answer any THREE Questions			
10	Discuss the significance of ISBD in standardisation of bibliographic record format. Describe the different areas of ISBD (G).	Describe	Analyse
11	Standards for MARC.	Explain Discuss	Understand
12	Explain principles of Bibliographic description.	Assess	Skill
13	Trace evolution of Cataloguing rules and critically explain AACR-II.	Illustrate	Apply
14	What is indexing system? Differentiate between pre coordinate and post coordinate indexing system with suitable example.	Differentiate Define	Understand

SEMESTER - II					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/2/CC/06	Knowledge Organization – Classification (Theory)	2	1	-	3

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

(Course outcomes are specific for a particular course. CO should be specific, measurable, achievable, realistic, and time-bound)

	Course Outcome	**Level**
CO 1	Explain the universe of knowledge and modes of subject formation	Remember
CO 2	Understand he theories and principles of knowledge organization	Understand
CO 3	Developing a theoretical base on different classification schemes.	Apply
CO 4	Examine various library classification schemes.	Analyze
CO 5	Apply the theories of knowledge organization in digital environment.	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	**Knowledge Organization:** Universe of Knowledge/Subject: Nature and Attributes; Modes of Formation of Subjects.	12
II	**Theories of Classification:** Schools of Classification; Normative Principles; The Three planes of work; Principles and postulates of Helpful Sequence; Facet Analysis; Notation: Kinds and Hospitality; Call Number.	12
III	**Classification Schemes:** Features of Library Classification Schemes;	12

	Salient Features of DDC, UDC and CC.	
IV	Interdisciplinary Applications of Knowledge Organisation Theories Application of facet theory of knowledge organisation in website designing, faceted search, domain modelling. SKOS.	12
	Tasks and Assignments: Assignment 1: Prepare a concept map of Ranganathan's theory of knowledge organization. Assignment 2: Critically evaluate a given classification scheme. **References:** • Bowman, J. H (2004). Essential Dewey. Facet Publishing. • Broughton, Vanda. (2004). Essential Classification. Facet Publishing. • Comaromi, J. P., Warren, M. J. & Dewey, Melvil. (1982). Manual on the Use of the Dewey Decimal Classification. Forest Press. • Foskett, A. C. (2002). The Subject Approach to Information. Facet Publishing. • Hussain, Sabahat. (2004). Library Classification: Facets and Analysis. B. R.Publishing. • Kao, Mary L. (2003). Cataloguing and Classification for Library Personnel. Jaico • Kumar, P. S. G. (2003). Knowledge Organization, Information Processing and Retrieval Theory. B. R. Publishing. • Ranganathan, S. R. (2006). Philosophy of Library Classification. Ess Ess.	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	**PO2**	**PO3**	**PO4**	**PO5**
CO1	**3**	**3**	**3**	**3**	**3**
CO2	**3**	**3**	**3**	**3**	**3**
CO3	**3**	**3**	**3**	**3**	**3**
CO4	**2**	**2**	**1**	**3**	**2**
CO5	**1**	**1**	**1**	**1**	**3**

d. Evaluation Scheme

	CO1	**CO2**	**CO3**	**CO4**	**CO5**	**Total**
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	**CO2**	**CO3**	**CO4**	**CO5**
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (5 x 2 = 10 marks)	2	2	2	2	2
Part – B (5 x 4 = 20 marks)	10	10	-	-	-
Part – C (3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported;	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza -tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs

1	**Knowledge and Understanding** **50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	Part – A: **Marks: 5x 2 = 10**		
1	List out major modes of formation of subjects	Recall	Remember
2	What is SKOS	Recall	Remember
3	What is Call number	Recall	Remember
	PART – B Short Answer **Marks:5 x 4 = 20**		
21	Explain the features of a library classification scheme	Explain	Understand
22	Define the concept of fundamental categories	Differentiate/define	Understand
23	Explain major the qualities of notation with proper examples	Cite Examples	Understand
24	Faceted search – user interface for DLIS website	Illustrate	Apply
PART – C Essay Answer **The answer should not exceed 400 words Marks: 3 x 10 = 30**			
25	Describe salient features of UDC	Describe	Analyze
26	How do you explain the need and purpose of a library classification scheme?	Explain Discuss	Understand
27	How do you explain the significance of knowledge organisation in a digital environment? Justify your views.	Assess	Skill

SEMESTER - II

Course Code	Course Name	L	T	P	Credits
LIS/2/DSE/10	Technical Communication	2	1	-	3

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

(Course outcomes are specific for a particular course. CO should be specific, measurable, achievable, realistic, and time-bound)

At the end of the course, the students will be familiar with the process of technical writing, they also be getting idea about presentation of information in technical writing, and they also will be trained on audio visual presentation skills.

	Course Outcome	Level
CO 1	Define communication and list its types	Remember
CO 2	Differentiate between creative writing and technical writing	Understand
CO 3	Use style manuals	Apply
CO 4	Compare the structure of different types of technical write-ups	Analyze
CO 5	Prepare different types of technical documents	Skill

b. Syllabus

Units	Content	Hrs.
I	**Technical writing** Communication Process - Types: Verbal, Non-verbal; Formal, Informal; Types of writing; Technical writing: Principles, characteristics; Language as a medium for communication readability; Audience Research	12
II	**Organization, Layout and Presentation of Information** Learned papers and popular articles, Technical Reports and project proposals; Book design and page layout.	12
III	**Mechanics of Writing** Common problems in spelling, grammar, usage and punctuation; Use of Style manuals – Chicago, APA and MLA; Reference Management Software; Copy editing and proof reading.	12
IV	**Oral Presentation Skills** Requirements for Audio Visual presentation.	12
	Tasks and Assignments: Each student is required to submit the following: • Prepare an indicative and informative abstract of a research paper • Develop a project proposal/report • Take seminar with PPTs on the assigned topic **References:** Booth, P. F. (1991). *Report Writing*. 2nd Ed. Huntington. Chandra, A. & Saxena, T. P. (1979). *Style Manual*. Metropolitan Books.	

	Cooper, B. M. (1986). *Writing Technical Reports*. Penguin. Gerson, S. J. & Gerson, S. M. (1992). *Technical Writing, Process and Product*. Prentice Hall. Huckin, T. N. & Olsen, L. A. (1991). *Technical Writing and Professional Communication for Non-Native Speakers of English*. 2nd Ed. McGraw-Hill. James, G. Gray. (1986). *Strategies and Skills of Technical Presentations*. Greenwood Press. Sherman, T. A. and Johnson, S. S. (1990). *Modern Technical Writing*. 5th ed. Englewood Cliff's: Prentice Hall. Van Alstyne J. S. (1986). *Professional and Technical Writing Strategies.* Englewood Cliffs, New Jersey: Prentice-Hall Inc. Weisman, H. M. (1980). *Basic Technical Writing*. Charles Oren ill Publishing.	

c. Mapping of ProgramOutcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (Objective - 10 x 1 = 10marks)	2	2	2	2	2
Part – B (Short Answer -5 x 4 = 20marks)	10	10	-	-	-
Part – C	-	-	10	10	10

(Essay-3 x 10 = 30 marks)					
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideasare detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported;	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiz a -tion 50%**	Includes title, introduction,statement ofthe main idea withillustration and conclusion.	Includes title, introduction,statement ofmain ideaand conclusion.	organizational tools are weak or missing	Noorganization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4

2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	Part – A: **Marks: 5 x 2 = 10**		
1	Identify any four advantages of Oral Communication.	Recall	Remember
2	Define Readability.	Recall	Remember
3	What do you understand by reference management? Write names of any two open source reference management software.	Recall	Remember
4	What do you understand by Annotated Bibliography?	Define in your own words	Understand
5	Explain the process of communication with flowchart.	Summarize	Understand
	PART – B Short Answer **The answer should not exceed 200 words arks:4 x 5 = 20**		
21	Explain the types of non-verbal communication. (or) Discuss the characteristics of and steps involved in the preparation of a review article.	Recall	Remember
22	Differentiate between Indicative abstract and Informative abstract (Or) Differentiate between reference, bibliography and annotated bibliography.	Differentiate	Understand
23	Compare the features of Mendeley and Zotero (Or) Distinguish technical writing from creative writing	Compare	Analyze
24	Apply Cloze test to find out the readability of the given text (Or) Find out the gunning fog index for the given paragraph and	Use and Find out	Apply and Evaluate

	interpret the readability of the text.		
PART – C Essay Answer The answer should not exceed 400 words Marks: 3 x 10 = 30			
25	Discuss the components of a Research proposal.	List	Remember
26	What is communication? Discuss different types of communication with their advantages and disadvantages.	Cite examples	Understand
27	Define audio-visual aids. What is your perception about the role of audio-visual aids in classroom instruction?	Examine	Analyze
28	How does the format of a research report vary from that of a normal technical report?	Compare	Evaluate
29	Prepare an abstract of the given article	Organize	Create

SEMESTER - III					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/3/CC/14	Introduction to ICT & Applications in Libraries (Theory and Application)	2	0	2	4

a. Course Outcome (CO)

After completion of the course, students will be able to understand the development of computers and ICT, the different software and hardware components, devices, operating systems and programming languages etc.

	Course Outcome	**Level**
CO 1	Explain the development of computers and ICT in libraries.	Understand
CO 2	Illustrate the the use of various softwares in libraries	Apply
CO 3	Examine the different library software and its applications.	Analyze
CO 4	Formulate the a method to be adopted in the library security technologies.	Create
CO 5	Assesses the ability of the students on their practical use of ICT applications.	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	**Computer Technology** Evolution of Digital Computers; Number systems; Character Representation: ASCII, ISCII and UNICODE; Basic Components of a Computer: Arithmetic Logic Unit; Control Unit; Memory Unit; Input / Output devices; System Software; Application software. Operating Systems: Linux, Windows; Fundamentals of programming; Introduction	16

	to 'C' programming; Object oriented programming. Java, PHP.	
II	**Introduction to Communication Technology** Tele-communication: Transmission Media, ISDN, PSDN, Multiplexing, Modulation, Standards and Protocols, Wireless Communication; Networking: Topology and levels of networks, Network protocols, Network Models (OSI), Tools and Devices. Hardware requirements; Network Types and topologies: LAN, MAN, WAN, Wireless; Bus, Star, Ring and Token; Setting up Server; Cloud Computing.	16
III	**Library Automation** Planning and implementation; Automation of in-house operations – file requirements for Acquisition, Cataloguing, Circulation control, Serials Control, OPAC; Library Security Technology: Barcode, QR code, RFID, CCTV, Biometrics, Smartcard.	16
IV	**Library Automation Packages** KOHA, Hands-on experience on Library Automation Software: KOHA.	16
	Tasks and Assignments: Each student is required to submit the following: ✓ A study report on Library security technologies applied in academic libraries. ✓ Prepare a report on the features of various library automation software packages. ✓ Hands-on experience on Library Automation Software: KOHA **References:** • Bach, Maurice J. (2015). Design of the Unix Operating Systems. Pearson • Bilal, Dania (2014). Library Automation: Core Concepts and Practical Systems Analysis, 3rd Edition. ABC-CLIO. • Brown-Syed, Christopher (2011). Parents of Invention: The Development of LibraryAutomation Systems in the Late 20th Century. ABC-CLIO. • Date, C. J. (2003). An Introduction to Database Systems. Pearson Education. • Doyle, Stephen (2015) Complete ICT for Cambridge IGCSE. Oxford University Press. • Gopal Krishan. (2005). Modern Library Automation. Authors Press. • Grewal, Gagandeep. (2004). Handbook of Library Security. Dominant. • Kochtanek, Thomas R. & Matthews, Joseph R. .(2011). Library Information Systems: From Library Automation to Distributed Information Access Solutions. Libraries Unlimited. • Leon, Alexis & Leon, Mathews. (2006). Fundamentals of Database Management Systems. Vijan Nicole. • Matthew, Neil & Stones, Richard. (2008). Beginning Linux Programming. Wiley	

- Petersen Richard .(2017). Linux: The Complete Reference, McGrawHill.
- Reddy, Satyanarayana. (2001). Automated Management of Library Collections. Ess Ess.
- Redmond E. (2012). Seven Databases in Seven Weeks. Shroff.
- Shotts, Williams E. (2012). The Linux Command Line – A Complete Introduction. No starch Press.
- Silberschatz, A.(2005). Operating System Concepts. Wiley
- Silberschatz. (2013). Database System Concepts Paperback. McGrawHill.
- Siwatch, Ajit S. et al. (2006). Approaches to Modern Librarianship. Sanjay.
- Stallings, William. (2007). Computer Networking with Internet Protocols and Technology. Pearson.
- Sujatha, G. (1999). Resource Sharing and Networking of University Libraries. Ess Ess
- Sybex. (2007). Linux Complete. BPB Publications.
- Ward, Brian (2014) How Linux Works – What Every Super user Should Know . No Starch Press.
- Wilson, Kevin (2016).Essential Computing: Concepts of ICT. Elluminate Press.

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5

Part – A (Objective - 5 x 2 = 10 marks)	2	2	2	2	2
Part – B (Short Answer - 5 x 4 = 20 marks)	10	10	-	-	-
Part – C (Essay- 3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza -tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4

2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	Model Questions	Specification	Level
	PART- B (4 x 5 = 20 marks)		
1	Fifth generation computers.	Recognize	Remember
2	ISDN	Recall	Remember
3	Differentiate between Switches and Hubs.	Recognize	Remember
4	Difference between Windows and Ubuntu operating systems.	Recognize	Remember
5	Calculate the number of bits in two kilobytes.	Recognize	Remember
	PART- C (3 x 10 = 30 marks) Answer any THREE Questions		
21	Advantages of Optical fibres Or What is programming? Describe the features of different programming languages.	Explain	Understand
22	Network models Or Explain Wireless technology and networks.	Differentiate Define	Understand
23	Internet protocol Or RFID Technology.	Cite Examples	Understand
24	File requirements for an automated Circulation Control System Or What are various features of Linux based operating systems?	Illustrate	Apply
	PART – C Essay Answer **The answer should not exceed 400 words 3 x 10 = 30**		
25	Define Library and Information Network. Discuss the major library networks in India.	Describe	Analyse
26	Trace the evolution of computers and explain different types of computers.	Explain Discuss	Understand
27	Discuss the different transmission media used in networks.	Assess	Skill
	Describe library automation packages. Discuss salient features of KOHA software.		

	Explain various Network Topologies.		

SEMESTER - III					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/3/CC/15	Digital Library and Content Management Systems (theory)	3	1	0	4

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

	Course Outcome	**Level**
CO 1	Explain the role of digital Libraries and in the development of libraries	Understand
CO 2	Illustrate the digital development skill and competencies	Apply
CO 3	Examine the information Literacy in different circumstances	Analyze
CO 4	Formulate the solutions for the dissemination of information	Create
CO 5	Assesses intelligence with the help of a tool	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	**igitalLibraryConcepts** HistoricalDevelopmentofDigitalLibraries;DigitalLibraryConcepts,Institutional Repositories (National & International Initiatives) Digital LibraryArchitectures; Copyright, IPR and other legal issues. Software, Hardware andbest practices; Scanners and scanner types; Optical character recognition andcomparativestudyofOCRsoftware	16
II	DigitallibrarysoftwareandDigitalPreservation Features and comparative study of Greenstone, D-Space, andEprints;Harvesting Metadata, OAI-PMH and DL. Standards and File formats,Harvesting Metadata, OAI-PMH and DL Interoperability;Harvester software;Digital Resources; strategy for preservation, unique identifiers, Users, anduser interfaces.	16
III	IntroductiontoCMS Definition, Benefits; Principles of CMS; CMS Architecture. System and dataintegration in CMS. Introduction to content management, Content strategy andplanning.	16
IV	**reatingandmanagingWebsites** Addingandmanagingcontent,addingmanagingfunctionality,Desi gningprinciples, best practices	16

V	Concept of Search Engine Optimization. Word press,Drupal, andJoomla.	16
	Tasks and Assignments: Each student is required to submit the following: **4.** This course emphasizes on building a strong theoretical base for the concept of the digital library, content management tools, and website creation. REFERENCES REFERENCES Bishop, A. P., Van House, N. A., & Buttenfield, B. P. (Eds.). (2003). Digital library use: Social practice in design and evaluation. MIT Press. Chowdhury, G. G. & Chowdhury, Sudatta. (2003). Introduction to Digital Libraries. : Ane Books. Chowdhury, G. G., & Foo, S. (Eds.). (2012). Digital libraries and info rmation access: research perspectives. Facet Publishing. Deegan, Marilyn & Tanner, S. (2006). Digital Preservation.Facet Publishing. Fox, Edward; Andre Goncalves, Marcos & Shen, Rao (2012) Theoretical Foundations for Digital Libraries: The 5SApproach. Morgan and Claypool Jones, Richard et al. (2006). The Institutional Repository. Oxford: Chandos Publishing. Judith, Andrews & Derek, Law. (2004). Digital Libraries. Ashgate. Lucy A. Tedd & Andrew Large. (2004). Digital Libraries : Principles and Practice in a Global Environment. G.G. Saur. Purcell, Aaron .(2016). Digital Library Programs for Libraries and Archives: Developing, Managing and Sustaining Unique Digital Collections. ALA	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-

Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (short Notes 5 x 2 = 10 marks)	2	2	2	2	2
Part – B (Short Answer - 5 x 4 = 20 marks)	10	10	-	-	-
Part – C (Essay- 3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza -tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs

1	**Knowledge and Understanding** **50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	Part – A: Short Notes **Short Answers 5 x 2 = 10**		
1	Define digital Libraries	Recognize	Remember
2	OCR Software	Recall	Remember
3	Taxonomy	Recognize	Remember
4	Metadata	Recognize	Remember
5	Content Management	Recognize	Remember
	PART – B Short Answer The answer should not exceed 200 words 5 x 4 = 20		
21	a) Discuss the Components of the Digital Library (or) b) What is Digital Library	Explain	Understand
22	a) Differentiate: Digital Library and Virtual Library (or) b) Define Scanners Explain the different types of scanners	Differentiate Define	Understand
23	a) Give two examples for digital library Software packages or) b) Give two examples for digital Content Management Software packages	Cite Examples	Understand
24	a) Illustrate the Architecture of Digital Libraries (or) b) Illustrate the Stage of Content Management	Illustrate	Apply
	PART – C Essay Answer **The answer should not exceed 400 words 3 x 10 = 30**		
25	a) Describe the Web Content Management (or) b) Examine the Greenstone Library software package	**Describe**	**Analyze**
26	a) Explain the Harvesting of Meta Data (or)	**Explain**	**Understand**

	b) Discuss the advantage of Digital Libraries	**Discuss**	
27	a) Assess current Trends in Library Software Packages (or) b) Assess the Software and hardware requirements of digital Libraries	**Assess**	**Skill**

SEMESTER - III					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/3/DSE/17	Knowledge Management	2	1	0	3

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

(Course outcomes are specific for a particular course. CO should be specific, measurable, achievable, realistic, and time-bound)

	Course Outcome	**Level**
CO 1	Explain the concept of knowledge along with categorization of knowledge.	Remember
CO 2	Understand the concepts and characteristics of knowledge-based economy	Understand
CO 3	Knowledge management strategies and tools in various environments	Apply
CO 4	Analyse the KM strategies through various case studies	Analyze
CO 5	Assess knowledge needs and map the knowledge sources in an organization	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	**Knowledge Economy:** Features, characteristics, complex nature of knowledge, taxonomy of knowledge; Need for Knowledge Management.	12
II	**Knowledge Management-Basics:** Meaning and definition of KM; Types of knowledge; KM Systems; Knowledge creation and knowledge architecture – Nonaka's model.	12
III	**Knowledge Management Strategies:** Capturing tacit knowledge – methods; Knowledge codification – tools and procedures; Knowledge Mapping; Knowledge testing; Knowledge transfer.	12
IV	**Knowledge Management System-**Tools and Portals Data visualization; Data mining; Managing knowledge workers. Knowledge Management in Library and Information Centers	12
	Tasks and Assignments: Assignment 1: Case study discussions Assignment 2: Seminar on assigned topics **References:** • Cappelli, Peter. (2010). The performance effects of it-enabled knowledge management practices. Cambridge. • Christee Gabour Atwood.(2009). Knowledge Management Basics. ASTD Pess. • Dalkir, Kimiz & Liebowitz, Jay (2011). Knowledge Management	

	Theory & Practice.MIT Press • Easterby-Smith, Mark & Lyles, Marjorie A. (2011). Handbook of organizational learning and knowledge management. Wiley. • Frappaolo, Carl. (2006). Knowledge Management. Capstone. • Hislop, Donald. (2009). Knowledge Management in organization. Oxford. • Holsapple, Clyde. (2004).Handbook on Knowledge Management 1: Knowledge Matters. Springer • Jennex, Murray E. (2008). Knowledge Management: Concepts, Methodologies, Tools and Applications. Information Science Reference. • Liebowitz, Jay (2012). Knowledge Management Handbook: Collaboration and Social Networking. Taylor and Francis.	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5
CO1	**3**	**3**	**3**	**2**	**3**
CO2	**3**	**3**	**3**	**3**	**3**
CO3	**3**	**3**	**3**	**3**	**3**
CO4	**2**	**2**	**1**	**3**	**2**
CO5	**1**	**1**	**1**	**1**	**2**

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (5x 2 = 10 marks)	2	2	2	2	2
Part – B (5 x 4 = 20 marks)	10	10	-	-	-
Part – C (3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported;	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza-tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation 50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	Model Questions	Specification	Level
	Part – A **Marks: 5 x 2 = 10**		
1	What is tacit knowledge	Recall	Remember
2	Name any two methods used for capturing tacit knowledge	Recall	Remember
3	Name any two techniques of data visualization	Recall	Remember
	PART – B **Marks:5 x 4 = 20**		
21	Explain the process of Knowledge mapping in an organization	Explain	Understand
22	Illustrate SECI model of knowledge dimensions with proper examples	Illustrate	Apply
PART – C Essay Answer **The answer should not exceed 400 words Marks: 3 x 10 = 30**			
25	Explain the role of libraries in KM of an organization	Describe	Analyse

SEMESTER - III					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/3/OE/19	Intellectual Property Rights	3	-	-	3

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

(Course outcomes are specific for a particular course. CO should be specific, measurable, achievable, realistic, and time-bound)

At the end of the course, the students will be familiar with the process of technical writing, they also be getting idea about presentation of information in technical writing, and they also will be trained on audio visual presentation skills.

	Course Outcome	**Level**
CO 1	Define Intellectual Property and enumerate different types of IPR	Remember
CO 2	Differentiate between different types of IPR	Understand
CO 3	Learn laws related to IPR	Apply
CO 4	Examine copyright issues while sharing web based content	Analyze
CO 5	Learn about alternative movements for free flow of information	Evaluate

b. Syllabus

Units	Content	Hrs.
I	**Intellectual Property Rights** Meaning and scope; Categories of IP	12
II	**International Treaties on IPR**	12

	Berne Convention; Universal Copyright Convention; Stockholm Conference; Paris Conference; WIPO Copyright treaty; GATT; TRIPS.	
III	**National Laws** Copyright law of India and its amendments; Fair use provision; Patent law of India and amendments; Other Laws related to IPR.	12
IV	**Implications of IPR** Protection of web-based content; Copyright and libraries; Copy left movement; Creative Commons; Plagiarism.	12
V	**Open access movement** History of open access movement, approaches to open access, Stake holders of OA, policies and guidelines. Open access journals and repositories	12
	Tasks and Assignments: Each student is required to submit the following: • Analyse the given two cases and determine their patentability • Take seminar with PPTs on the assigned topic **References:** Agnew, Grace. (2008). *Digital Rights Management: A Librarian's Guide to Technology and Practise*. Chandos Andrew Murra. (2010).*Information Technology Law: The law and society*. Oxford. Carlos M. Correa and Abdulqawi A. Yusuf. (2008). *Intellectual Property and International Trade: The TRIPS Agreement* . Oxford. Deborah E. Bo choux. (2012). *Intellectual Property: The Law of Trademarks, Copyrights, Patents, and Trade Secrets* . Cengage. Munari, Federico & Oriani, Raffaele. (2011). *The Economic Valuation of Patents: Methods and Applications*. Edward. Fishman, Stephen. (2008). *The copyright handbook: what every writer needs to know*. Berkeley. Nolo. Freeman, Lee & Peace, A. Graham. (2005). *Information ethics: privacy and intellectual property*. Information Science Pub. Jessica Littman. (2001). *Digital Copyright: Protecting Intellectual Property on the Internet*. Prometheus. May, Christopher .(2007). *Digital Rights Management: The Problem of Expanding Ownership Rights*. Chandos Much, Jude C. (2008). Trade Marks and Copyright for Dummies. Amazon.com. The World beyond Digital Rights Management. Wiley. YiJun Tian and Jane Winn. (2008). *Re-thinking Intellectual Property: The Political Economy of Copyright Protection in the Digital Era*.	

	Routledge.	

c. Mapping of ProgramOutcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (Objective - 10 x 1 = 10marks)	2	2	2	2	2
Part – B (Short Answer -5 x 4 = 20marks)	10	10	-	-	-
Part – C (Essay-3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs

1	**Content** **50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideasare detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported;	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiz a -tion** **50%**	Includes title, introduction,statement ofthe main idea withillustration and conclusion.	Includes title, introduction,statement ofmain ideaand conclusion.	organizational tools are weak or missing	Noorganization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Knowledge and Understanding** **50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	Part – A: **Marks: 5 x 2 = 10**		
1	Define Intellectual Property Right.	Define	Remember
2	List any four Industrial Property Rights.	List	Remember

3	Differentiate between copyright and neighboring rights.	Differentiate	Understand
4	What do you understand by fair use provision?	Define in your own words	Understand
5	Distinguish between a trademark and geographical indication.	Distinguish	Analyaze
	PART – B Short Answer **The answer should not exceed 200 words arks:4 x 5 = 20**		
21	Write a short note on Berne Convention (or) Paris Convention	Recall	Remember
22	Discuss the Copyright Law of India and its major amendments (Or) Discuss the Patent Law of India and its amendments	Recall	Remember
23	Critically evaluate if copy left movement will lead to free flow of information. (Or) Will open access movement accelerate our journey towards a knowledge society? What do you think?	Evaluate	Evaluate
24	Examine who are the stakeholders of Open Access movement. (Or) What do you understand by DRM? Critically examine the role of libraries in protecting the rights of web based content.	Examine	Analyze
	PART – C Essay Answer **The answer should not exceed 400 words Marks: 3 x 10 = 30**		
25	List the major treaties for international protection of IP administered by WIPO. Describe the Madrid System.	Recall	Remember
26	What do you understand by Intellectual Property Right? Discuss in detail different types of IPR.	Differentiate	Understand
27	Discuss why Intellectual Property Rights are needed. What are the provisions under law to ensure the balance between rights of the IP owner and the benefits of the society?	Examine	Analyze
28	What is OA? Examine various approaches to OA.	Compare	Analyze
29	Explain what a patent is. How do you determine the patentability of an invention? Discuss with examples.	Evaluate	Evaluate

SEMESTER - IV					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/4/CC/21	Information Retrieval	3	1	-	4

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

(Course outcomes are specific for a particular course. CO should be specific, measurable, achievable, realistic, and time-bound)

	Course Outcome	**Level**
CO 1	Explaining the basic concepts of information retrieval systems	Remember
CO 2	understanding the fundamentals of Database management systems.	Understand
CO 3	Applying indexing techniques in platforms such as digital libraries	Apply
CO 4	Analyze various information retrieval models	Analyze
CO 5	Designing information retrieval systems such as digital libraries and OPACS	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	**Unit 1: Basic concepts of Information Retrieval :** Overview IR systems; Historical Perspectives; Measures of Performan andEvaluation.	16
II	**Unit2: Introduction to DBMS:** File management vs. Database management, integrity and security issues. E- R Models; Logical Database Design, Relational and Object Oriented Database Models, Normalization. SQL, Implementation in MySQLor PostgreSQL.	16
III	**Indexing Systems and Techniques** : Assigned Indexing Vs Derived Indexing: Pre and Post Coordinate Indexing; Citation Indexing.	16
IV	**IR Models:** Boolean, Vector and Probabilistic Models; Alternative IR Models: set theoretic, algebraic models, and probabilistic model (Bayesian networks). Structured Text Retrieval Models: model base on non-overlapping lists and proximal nodes. Text Operations document pre-processing (word stemming, stop words, thesauri) documentclustering.	16
V	**Information Search:**Searching vs. browsing; dynamic query formulation: keyword based querying, pattern matching, structuralqueries, query protocols; Hybrid, statistical and knowledge approaches: query expansion and refinement based on similarity measures; Designing End User Interface Database searchingPractice.	16
	Tasks and Assignments: Assignment 1: Comparison of selected Search platforms. Assignment 2: To present a seminar on given topic. **References:**	

	• Chowdhury, G G .(2010). Introduction to Modern Information Retrieval. Facet Publishing. • Lancaster, F.W. (1977). The Measurement and Evaluation of Library Science. Information Sources Press. • Fugman, Robert. (1993). Subject Indexing and Analysis Theoretical Foundations & Practical Advice. Verlag. • Becker, Joseph & Hayes, Robert M. (1967). Information Storage and Retrieval tools Elements &Theories. New York: John Wiley. • Meadow, Charles T. (2000). Text Information retrieval system. Academic Press • Christopher D. Manning, Prabhakar Raghavan, Hinrich Schütze. (2008) Introduction to Information Retrieval, Cambridge University Press.	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5
CO1	**3**	**3**	**3**	**3**	**3**
CO2	**3**	**3**	**3**	**3**	**3**
CO3	**3**	**3**	**3**	**3**	**3**
CO4	**2**	**2**	**1**	**3**	**2**
CO5	**1**	**1**	**1**	**1**	**3**

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (5 x 2 = 10 marks)	2	2	2	2	2
Part – B (5 x 4 = 20 marks)	10	10	-	-	-
Part – C (3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported;	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza-tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation 50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	Model Questions	Specification	Level
	Part – A: **Marks: 5x 2 = 10**		
1	List out the components of an IR system	Recall	Remember
2	What is precision	Recall	Remember
3	Name any two DBMS packages	Recall	Remember
	PART – B **Marks:5 x 4 = 20**		
21	Explain the evaluation of an IR system	Explain	Understand
22	Define the concept of controlled vocabulary	Differentiate/define	Understand
23	What is precordinate indexing? Explain with proper examples.	Cite Examples	Understand
	PART – C Essay Answer **The answer should not exceed 400 words Marks: 3 x 10 = 30**		
26	What is document preprocessing? Discuss major methods with suitable example	Explain Discuss	Understand

SEMESTER - IV					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/4/CC/22	Research Methods	2	2	0	4

a. Course Outcome (CO)

On the successful completion of the course, the student will be able to

	Course Outcome	Level
CO 1	Explain the role of Research in Library and Information Science	Understand
CO 2	Illustrate the Research Problems and identification	Apply
CO 3	Examine the Research method and Techniques	Analyze
CO 4	Formulate the solutions for their research problems	Create
CO 5	Assesses intelligence with the help of a Research tool	Skill

b. Syllabus

Units	Content	Hrs.
I	Unit 1: Research: meaning and types Concept, Meaning and Process of Research; Types of Research.	16
II	Unit 2: Research Design Types of research design; Identification and formulation of problem; Hypothesis; Designing research proposal; Ethical aspects of research; Literature search: print, non-print and electronic sources; Literature Review.	16
III	Unit 3: Research Methods Scientific Method; Historical Method; Descriptive Method; Survey and Case Study Method; Experimental Method and Delphi Technique; Bibliometrics,	16

	Informetrics, Scientometrics, Webometrics and Altmetrics.	
IV	Unit 4: Data Collection, Analysis, and Interpretation Collection of Data by Questionnaire, Interview, Observation and Sampling; Presentation of Data-Tables, Charts and Graphs; Interpretation of Data: Frequency Distribution, Measures of Central tendency, Analysis of Time Series, Co-relation Studies and Analysis of Variance; Regression Analysis; Use of Statistical Packages. Unit 4: Information Literacy Policies International and national initiatives, Policies and guidelines IFLA, ALA, UNESCO, Information literacy skills and best practices.	16
V	Unit 5: Research Reporting Structure, style, contents; Guidelines for research reporting; Style manuals; Reference management software; Methods of research evaluation. Current Trends in Library and Information Science Research	16
	Tasks and Assignments: Each student is required to submit the following: ✓ Observe Research problems in the field of Library and Information Science ✓ Prepare a case study on Libraries' disadvantaged groups. ✓ Observe and interact with different types of Libraries, working groups **REFERENCES** Booth, W. C., Williams, J. M. & Colomb, G. G. (2003). The Craft of Research. University of Chicago Press. Brady, John. (1997). The Craft of Interviewing. Vintage. Gilliam, Bill. (2000). The Research Interview. Continuum Press. Kish, Leslie. (1995). Survey Sampling. Wiley. Marshall, Catherine & Rossman, Gretchen B .(2006). Designing Qualitative Research. Sage. Nielsen, Jakob. (2000). Designing Web Usability. New Riders. Patterns Rea, Louis M & Parker, Richard A. (2005). Designing and Conducting Survey Research. Jossey-Bass. Reinard , John C. (2006). Communication Research Statistics. Sage, USA. Row tree, Derek. (2003). Statistics without Tears: A Primer for Non-Mathematicians. Penguin. Rubin, Herbert and Irene (2004). Qualitative Interviewing: The Art of Hearing Data. Sage, USA. Sudman, Seymour (1976). Applied Sampling. Academic Press. Wadsworth, Yoland . (1998). Everyday Evaluation on the Run: A collection of simple methods for evaluating the success of any project. Allen & Unwin. Williams, Frederick & Monge, Peter. (2001). Reasoning with Statistics. Harcourt. Willis, Gordon B. (2004). Cognitive Interviewing: A Tool for Improving Questionnaire Design. Sag	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3

CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	**CO2**	**CO3**	**CO4**	**CO5**	**Total**
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	**CO2**	**CO3**	**CO4**	**CO5**
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Part – A (simple questions - 5 x 2 = 10 marks)	2	2	2	2	2
Part – B (Short Answer - 5 x 4 = 20 marks)	10	10	-	-	-
Part – C (Essay- 3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Content 50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza -tion 50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs
1	**Knowledge and Understanding 50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation 50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	Model Questions	Specification	Level
	Part – A: simple questions **Simple answers 5 x 2 = 10**		
1	Fundamentals of Research	Recognize	Remember
2	Review of Literature	Recall	Remember
3	Historical method	Recognize	Remember
4	Secondary Data	Recognize	Remember
5	Style manuals	Recognize	Remember
	PART – B Short Answer The answer should not exceed 200 words 5 x 4 = 20		
21	a) Discuss the identification of the Research problem (or) b) What is Research Ethics Explain why it is necessary	Explain	Understand
22	a) Differentiate: Case study and Historical method of research (or) b) Define Research	Differentiate Define	Understand
23	a) Give two examples for data collection in the tools (or) b) Give two examples for Statistical packages in the	Cite Examples	Understand

	research process		
24	a) Illustrate the Print and Nonpoint Resources (or) b) Illustrate good research report writing	Illustrate	Apply
	PART – C Essay Answer The answer should not exceed 400 words 3 x 10 = 30		
25	a) Describe the Components of the Research proposal (or) b) Examine the survey method of Research and its advantages	Describe	Analyze
26	a) Explain the Case Study method and its advantages (or) b) Discuss the interview method in Data collection	Explain Discuss	Understand
27	a) Assess current Trends in Library and information science (or) b) Assess steps involved in Research report writing	Assess	Skill

SEMESTER - IV					
Course Code	**Course Name**	**L**	**T**	**P**	**Credits**
LIS/4/DSE/24	Informetrics and Scientometrics	2	1	0	3

a. Course Outcome (CO)

After completion of the course, students will be aware of various scientometric indicators and laws, different softwares and application of metrics to draw the inferences from published literature.

	Course Outcome	**Level**
CO 1	Explain the various scientometric indicators and laws.	Understand
CO 2	Illustrate the the use of various softwares and application of metrics.	Apply
CO 3	Examine the different bibliometric indicators.	Analyze
CO 4	Formulate the a method to be adopted in the qualitative measurement of published literature.	Create
CO 5	Assesses the ability of the students on their practical awarenwss of bibliometric software.	Skill

b. Syllabus

Units	**Content**	**Hrs.**
I	**Informetrics** Genesis, scope and definition; Librametry, Bibliometrics, Scientometrics & Webometrics; Bibliometrics laws: Zip's law, Lotka's law, Bradford's Law of Scattering; Bookstein, Garfield, Price laws.	16
II	**Growth and Obsolescence of Literature** Various growth models; Aging factor and half-life.	16
III	**Application of Bibliometrics** Citation analysis: Bibliographic Coupling and Co-citation Analysis;	16

	Science indicators: Impact factor, h-index, g-index, i-10 index.	
IV	**Trends and Developments** Current trends and developments in Informetrics and Scientometrics; Software for bibliometric analysis with emphasis on Open sources software.	16
	Tasks and Assignments: Each student is required to submit the following: ✓ Prepare an assignment on current trends and developments in Informetrics and Scientometrics ✓ Survey the problems and shortcomings of the quantitative studies based on databases. **References:** • Almind, T C & Ingwersen, P. (1997) Informetric analysis of World Wide Web: Methodological approaches to webometrics. Journal of Documentation, 53(4).412-420. • Andres, Ana. (2009). Measuring academic research: How to undertake Bibliometric Study. Oxford. • De Bellis, N. (2009). Bibliometrics and citation analysis: From the Science Citation Index to Cybermetrics. Scarecrow press. • Egghe, L & Rousseau, R.. (1990). Introduction to Informetrics: Quantitative methods in library, documentation and information science. Elsevier Science. • Egghe, L. (2006). Theory and practice of the g-index. Scientometrics . 69(1): 131-152 • Egghe, L. (2010). The Hirch Index and related impact measures. ARIST, Vol.44, 65-114. • Hertzel, Dorothy H. (2003). Bibliometric history. In Encyclopeadia of Library & Information science. Ed.2. Vol. 1. Miriam A. Drake. Ed. New York: Marcel Dekker Inc. • Lancaster, F W. (1991). Biblometric methods in assessing productivity and impact of research. SRELS • Mahapatra, Gayathri .(2009). Biblometric studies: In the electronic era. Indiana Books • Moed, H F. (2000). Citation Analysis in research evaluation. Springer. • Ravichandra Rao, I K (1985). Quantitative methods of Library & Information science. Wiley. • Ravichandra Rao, I K. (2010). Growth of Literature and measures of scientific productivity: Scientometric models. Ess Ess. • Srivarthava, Ranjana. (2010). Biblometrics : New Dimensions and latest trend. Alpha Publication. • Sudhier, K.G. (2017). Informetric studies. B R Publishing Corporation • Vinkler, P. (2010). The evaluation of research by scientometric	

	indicators. Oxford: Chandos Publishing. • White, Howard D & Mc Cain, Katherine (1989). Biblometrics. In William, Martha E. Ed. ARIST, Vol. 24. Amsterdam: Elsevier science pub. • Wilson, C S. (1999) Informetrics. In Williams, M E. Ed., ARIST, Vol.34. Medford: Information Today.	

c. Mapping of Program Outcomes with Course Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	3	3	2	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	2	2	1	3	2	2
CO5	1	1	1	1	2	3

d. Evaluation Scheme

	CO1	CO2	CO3	CO4	CO5	Total
Internal	8	8	8	8	8	40
External	12	12	12	12	12	60
Total	**20**	**20**	**20**	**20**	**20**	**100**

e. Mapping Course Outcome with Internal Assessment (40 Marks)

	CO1	CO2	CO3	CO4	CO5
Assignments	2	2	-	-	2
Seminar	-	-	2	2	-
Test	5	5	5	5	5
Attendance	1	1	1	1	1
Total	8	8	8	8	8

f. Mapping Course Outcome with External Assessment (60 Marks)

Category	CO1	CO2	CO3	CO4	CO5
Part – A (Objective - 5 x 2 = 10 marks)	2	2	2	2	2
Part – B (Short Answer - 5 x 4 = 20 marks)	10	10	-	-	-
Part – C (Essay- 3 x 10 = 30 marks)	-	-	10	10	10
Total	**12**	**12**	**12**	**12**	**12**

g. Rubric for Assignments

Sl. No.	Criteria	100%	75%	50%	25%	0%	Relation to COs

1	**Content** **50%**	Ideas are detailed, well developed, supported with specific evidence &facts andexamples	Ideas are detailed, Developed and supported with evidence and facts mostly specific.	Ideas are presented but not particularly developed or supported.	Content is not sound	Not attended	CO1, CO2, CO5
2	**Organiza-tion** **50%**	Includes title, introduction, statement of the main idea with illustration and conclusion.	Includes title, introduction, statement of main idea and conclusion.	organizational tools are weak or missing	No organization	Not attended	CO1, CO2, CO5

h. Rubric for Seminar

Sl. No.	**Criteria**	**100%**	**75%**	**50%**	**25%**	**0%**	**Relation to COs**
1	**Knowledge and Understanding** **50%**	Exceptional knowledge of facts, terms, and concepts	Detailed knowledge of facts, terms, and concepts	Considerable knowledge of facts, terms, and concepts	Minimal knowledge of facts, terms, and concepts	Not Attended	CO3, CO4
2	**Presentation** **50%**	Well Communicated with logical sequences, examples, and references	Communicated with sequences	Just Communicated	No coherent communication	Not Attended	CO3, CO4

i. Model Question Paper

Sl. No.	**Model Questions**	**Specification**	**Level**
	PART- A (5 x 2 =10 marks) Answer ALL Questions		
1	What do you mean by self-citation?	Recognize	Remember
2	What is citation count?	Recall	Remember
3	What is impact factor?	Recognize	Remember

4	What is Publish or Perish?	Recognize	Remember
5	What is the use of Google Scholar?	Recognize	Remember
	PART- B (4 x 5 = 20 marks)		
6	What is Altmetrics? (Or) What are the formal channels of scholarly communications?	Explain	Understand
7	Explain bibliographic coupling with example. (Or) Discuss Price square root law.	Differentiate Define	Understand
8	Half life of literature (Or) Calculate h-index with suitable example.	Cite Examples	Understand
9	What are the limitations of citation analysis? (Or) Discuss Growth models of literature.	Illustrate	Apply
PART- C (3 x 10 = 30 marks) Answer any THREE Questions			
10	Write a detailed note on “citation databases for scholarly communications”.	Describe	Analyse
11	Do you know various indicators of scientometric study? Elaborate.	Explain Discuss	Understand
12	Explain bibliometric laws and discuss Bradford's law of scattering.	Assess	Skill
13	Describe aging and obsolescence of literature.		
14	Write an essay on “new trends in scientometrics”.		