Mother Teresa Women's University

Department of Library and Information Science

M.Lib.I.Sc.

Master of Library and Information Science(Two Years)

(with effect from the academic year
2021-2022 onwards)

Mother Teresa Women's University, Kodaikanal
Department of Library & Information Science
Choice Based Credit System (CBCS)
(2021-2022 onwards)

M.Lib.I.Sc.

About the Programme

Master of Library and Information Science is a Post Graduate Programme in Mother Teresa Women's University that incorporates the advanced study of principles and practices of library and Information Science along with the current technologies applied to Information access, processing, organisation and dissemination are the core components. This programme puts emphasis on handling and getting access to information in all forms rather than the conventional library activities. The popularity of the Programme has resulted in spreading its wing to abroad.

The Master of Library and Information Science (M.Lib.I.Sc.)Programme comprises 13 core courses, 3 Practices, 3 Supportive courses, 1 internship programme, 3 elective, a project, 2 Value Added Programmer, one MOOC-SWAYAM online course and 2 Non-Major Elective for 90 credits in four semesters.

The curriculum for M.Lib.I.Sc.Programme is designed to meet the present need of government, academic, corporate libraries and information industries to equip the students for employability.The Students are trained in the emerging technologies like Digital Libraries, Information Marketing, Content Management Systems, Knowledge Management, E-Learning and Web Technologies etc., with practical relevance to meet the current needs of the information industry and libraries.

Programme Educational Objectives (PEOs)

The Programme has been designed to enable the learners to

- connect foundational concepts, theories, and principles of information organization and access to professional contexts.
- design and develop systems and services that provide access to information.
- analyze evidence to address information challenges and opportunities.
- compare and critique approaches to information systems, structures, and standards.
- develop capacity to apply core ethical principles in professional and everyday practice.

Eligibility: Female candidates whohave passed in any Degree (UG/PG) witha minimum of 55%marks.

General Guidelines for PG Programme

i. Duration: The Programme shall extend through a period of 4 consecutive semesters and the duration of a semester shall normally be 90 days or 450 hours. Examinations shall be conducted at the end of each semester for the respective subjects.

ii. Medium of Instruction: English

iii. Evaluation: Evaluation of the candidates shall be through Internal Assessment and External Examinations.

Evaluation pattern	Theory		Practical	
	Min	Max	Min	Max
Internal	13	25	13	25
External	38	75	38	75

- **Internal (Theory): Test (15) + Assignment (5) + Seminar/Quiz(5) = 25**
- **External Theory: 75**

Question Paper Pattern for External Examination for Core and Elective Papers

Max. Marks: 75 **Time: 3 Hrs.**

S.No.	Part	Type	Marks
1	**A**	**10*1 Marks=10** Multiple Choice Questions - 2 questions from each Unit	**10**
2	**B**	**5*4=20** (Internal Choice with 2 questions from each Unit (Either/or)	**20**
3	**C**	**3*15=45** Open Choice - Any three questions out of 5 - one question from each Unit)	**45**
Total Marks			**75**

***Minimum credits required to pass - 90**

- **Project Report**

A student should select a topic for the Project Work at the end of third semester itself and submit the Project Report at the end of the fourth semester. The Project Report shall not exceed 75 typed pages.

- **Project Evaluation**

There is a Viva Voce Examination for Project Work. The Guide and an External Examiner shall evaluate and conduct the Viva Voce Examination. The Project Work carries 100 marks (Internal: 25 Marks, External (Viva): 75 Marks).

5. Conversion of Marks to Grade Points and Letter Grade

(Performance in a Course/Paper)

Range of	Grade Points	Letter Grade	Description

Marks			
90 – 100	9.0 – 10.0	O	Outstanding
80-89	8.0 – 8.9	D+	Excellent
75-79	7.5 – 7.9	D	Distinction
70-74	7.0 – 7.4	A+	Very Good
60-69	6.0 – 6.9	A	Good
50-59	5.0 – 5.9	B	Average
00-49	0.0	U	Re-appear
ABSENT	0.0	AAA	ABSENT

6. Attendance

Students must have earned 75% of attendance in each course for appearing for the examination, Students with 71% to 74% of attendance must apply for condonation in the prescribed form with the prescribed fee. Students with 65% to 70% of attendance must apply for condonation in the prescribed form with the prescribed fee along with the Medical Certificate. Students who have attendance below 65% are not eligible to appear for the examination and they shall re-do the semester(s) after completion of the course, with the prior permission of the Controller of the Examinations, and the Registrar of the University.

7. Maternity Leave

The student who avails maternity leave may be considered to appear for the examination with the approval of Staff i/c, Head of the Department, Controller of Examination and The Registrar.

8. Any Other Information

In addition to the above regulations, any other common regulations pertaining to the PG Programmes are also applicable for this programme.

M.Lib.I.Sc Curriculum

S. No.	**Course Code**	**Course Title**	**Credits**	**Hours**		**CIA**	**ESE**	**Total**
				L	**P**			
Semester I								
1	P21LST11	Library, Information And Society	4	5	-	25	75	100
2	P21LST12	Management of Library and	4	5	-	25	75	100

		Information Centres						
3	P21LST13	Information Sources and Services	4	5	-	25	75	100
4	P21LST14	Knowledge Organisation (Classification Theory)	4	5	-	25	75	100
5	P21LSP11	Knowledge Organisation (Classification Practice)	4	-	6	25	75	100
6	P21CSS11	*Supportive Course I (Skill)*- Computer Skill for Web Designing and Video Editing	2	-	4	25	75	100
		Total	22	30		-	-	600
Semester II								
11	P21LST21	Information and Communication Technology (ICT)	4	5	-	25	75	100
12	P21LST22	Knowledge Management	4	5	-	25	75	100
13	P21LST23	Information Need Assessment and Information Seeking Behaviour	4	4	-	25	75	100
14	P21LST24	Knowledge Organisation (Cataloguing Theory)	4	4	-	25	75	100
15	P21LSP22	Knowledge Organisation (Cataloguing Practice)	4	-	6	25	75	100
16		Non Major Elective	4	4	-	25	75	100
17	P21LSS22	Supportive Course II(Skill)- E-Resource Management	2	2	-	25	75	100
		Total	26	30		-	-	700
Semester III								
22	P21LST31	Research Methods and Techniques	4	5	-	25	75	100
23	P21LST32	Digital libraries	4	5	-	25	75	100
24	P21LST33	Robotic Process Automation for Library	4	4	-	25	75	100
25	P21LST34	Introduction to Industry 4.0	4	4	-	25	75	100
26	P21LST35	Metric Study	4	4	-	25	75	100
27	P21LSP33	Application of ICT Practice (Automation, Repositories,	4	-	6	25	75	100

		Content Management System)						
28	P21WSS33	Women Empowerment	2	2	-	25	75	100
		Total	26	30				700
Semester IV								
33	P21LSE411/ P21LSE412 P21LSE413	Elective I* Open Educational Resources or Open Access Initiatives or Marketing of Information and Services Or Any MOOC Course[$]	4	4	-	25	75	100
34	P21LSE421/ P21LSE422/ P21LSE423	Elective II* Academic Library System or Public Library System or Data Analytics using R Or Any MOOC Course[$]	4	4	-	25	75	100
35	P21LSR41	Project	8	-	22	25	75	100
		Total	16	30				300
Total			90	120				2300

Non Major Elective

The candidates who have joined the PG Programme, can also undergo Non Major Elective offered by other Departments.

Non Major Elective offered by the Department of Library Science

P21LSN211	Digital Portfolio Management
P21LSN212	Intellectual Property Rights

ADDITIONAL CREDIT COURSES

1. P21LSV11 - Value Added Program I- Digital Information Management -Two Credits (First Semester)
2. P21LSI21 -Internship / Library Training - Minimum 2 weeks – Two Credits- (Second Semester)
3. P21LSO31 -Online Courses (MOOC-SWAYAM) -Two Credits- (Third Semester)
4. P21LSV42 - Value Added Program II- E-Publication -Two Credits (Fourth Semester)

*Those who have CGPA as 9, and want to do the project in industry/institution during IV semester, may opt for these two papers in III semester.

$ Students can take one 4 credit course in MOOC as elective or two 2 credit courses in MOOC as elective with the approval of Department committee.

Outside Class Hours (Mandatory)

- Health, Yoga and Physical Fitness
- Library Information access and utilisation
- Employability Training
- Students' Social Responsibility

Programme Specific Outcomes (PSOs)

PSO No.	**Programme Specific Outcomes Upon completion of these courses the student would**
PSO-1	find placement in Public, Academic, Corporate and Special Libraries in India and Abroad.
PSO-2	applyfundamental concepts, theories, and principles to promote information organization and access, communicate capably with diverse stakeholders, promoting not just access to but also effective use of information services and systems in specific contexts.
PSO-3	use evidence to help address information problems, meet information needs, and create relationships in their institutions, communities, profession, and the world.

PSO-4	compare and critique contemporary information practices, structures, and standards in relation to historical and global alternatives.
PSO-5	apply core ethical principles in professional practice.

Programme Outcomes (PEOs)

PO No	Programme Outcomes Upon completion of the M.Lib.I.Sc. Degree Programme, the graduate will be able to
PO-1	acquire knowledge in the basics of professional skills for information / knowledge management, to enable the individual to serve the society through an library or information center
PO-2	understand the basic principles of Library and Information Science and to understand, appreciate and develop Professionalism for the competitive environment
PO-3	acquaint with the development of the Universe of Knowledge and methods of its organization in a library/information system.
PO-4	practice on latest trends of Information Management and equip them with skills for applying Information Communication Technologies (ICT) in libraries and information centers.
PO-5	know the various sources of information and training in techniques of dissemination of information.

SEMESTER – I

COURSE CODE	P21LST11	LIBRARY INFORMATION AND SOCIETY	L	T	P	C
CORE I			5	-	-	4

CO No.	Course Objectives
CO-1	To enable the students to understand the concept of Information, features of Information centres.
CO-2	To make aware of the types of libraries : its functions and services
CO-3	To enable the students to understand the Communication Channels and its barriers.
CO-4	To enable the students to understand the importance of information in the context of social, political, cultural, economic and industrial environments.
CO-5	To enable the students to understand the relevance of Library profession.

UNIT–I:Roleof Libraries

Libraries and Society Library as a Social Institution, Functional role of libraries in a society–DevelopmentofLibrariesinIndia - Role of Library and Information Centres in Modern Society-FiveLaws of LibraryScience: Books are for use, every reader his/her book, Every book its reader, save the time of the reader, Library is a growing organism

UNIT–II:TypesofLibraries,ProfessionalAssociationsandOrganizations

National Library of India: Concept, Functions and Services, Public Libraries, Academic

Libraries and Special librariesProfessionalAssociations:ILA,IASLIC,CILIP,ALA, ASLIB,SLA.NationalandInternationalOrganizations:RRRLF,UNESCOandIFLA.DigitalLibraries

UNIT–III:LibraryLegislation

Library Legislation: Need, Purpose, Objectives and Model Library Act. . . LibraryLegislationinIndia :Structureand SalientFeatures.PressandRegistrationAct-DeliveryofBooks(PublicLibraries)and Newspapers Act, Intellectual Property Rights – Right to Information Act; Knowledge commission.

UNIT–IV:InformationandCommunication

Information: Characteristics, Nature, Value and Use of InformationConceptual difference between Data, Information and KnowledgeCommunicationChannels, Modelsand Barriers, National Knowledge Commission and Information Policy, Information Intermediaries.

UNIT–V:Promoters of Library Services

Promoters of Library and Information Services – UNESCO, RRRLF, Library Networking and Consortia, Information Science as discipline – evolution, growth and development of LIS Schools in India – Current Trends.

Text Books

1. Khanna, J.K. Library and Society. Kurushektra: Research Publication, 1987
2. Kumar, P.S.G. Fundamentals of Information Science. Delhi: S. Chand publication. 1997
3. McGarry, Kevin. Communication, Knowledge and Libraries. London: Clive Bingley, 1981.
4. Ranganathan, S.R. Five Laws of Library Science. London: Vikas, 1957.
5. Richerd E Rubin. Foundations of Library and Information Science. New York, NY: Neal-Schuman Publishers. 2004.

Reference Books

1. Bhatt (R K). History and development of libraries in India.NewDelhi: MittalPublications,1995.
2. Chapman(EA)and Lynden(FC).Advancesinlibrarianship.San Diego: Academic Press,2000
3. Chowdhury (G G), Burton (P F) and McMenemy (D). Librarianship: thecomplete introduction.NewYork:Neal-SchumanPublishers,2008.
4. Feather(J).Theinformationsociety:astudyofcontinuityandchange.Ed.5. London: FacetPublishing,2008.
5. Krishankumar, LibraryOrganisation.NewDelhi:Vikas,1993.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1 https://www.mooc-list.com/instructor/helen-tibbo

2 https://www.mooc-list.com/certificate/yes-verified-certificate-paid?page...

3 https://www.mooc-list.com/tags/logic

COURSE	CO STATEMENT	KNOWLEDGE

OUTCOME		LEVEL
CO-1	Nation and nature of Information data knowledge concept	K1&K2
CO-2	Communication : concept, Definition, theories & model, channel of communication	K2
CO-3	Library: Concepts & types, Five Laws of Library Science, Professional ethics	K 2&K3
CO-4	Library movement & legislation in India	K3& K5
CO-5	Information Science as a discipline – Evolution, growth and development	K2

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

OUTCOME MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	M	S	S	M	S	S
CO2	M	S	S	S	S	S	S	S	S	S
CO3	M	M	S	M	S	S	S	S	S	M
CO4	M	M	S	S	M	S	S	S	M	S
CO5	S	S	S	S	S	S	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LST12**	**MANAGEMENT OF LIBRARY AND INFORMATION CENTRES**	**L**	**T**	**P**	**C**
CORE II			**5**	**-**	**-**	**4**

Objective:

To empower the aspirants to be service oriented managers and educators.

To enable the learner to

CO No.	Course Objectives
CO-1	understand the Library Management thoughts
CO-2	understand the concept involved in planning.
CO-3	understand and apply the concepts of personnel management in the field of Libraries.
CO-4	Learn about organization structure and hierarchy
CO-5	Understand the various steps involved in financial management

UNIT I - Introduction to Management

Management: Concept; scope; functions and principles, School of Management Thought :Maslow's System Approach- System Analysis and Design, System Evaluation.The schools of management thought are theoretical frameworks for the study of management: the classical school, the behavioral school,the quantitative or management science school, the systems school, and the contingency school.

UNIT II – Planning of Library

Planning-Library Building - Library rules and regulations, Annual report - Library statistics, Furniture and equipment, Library Building, Collection.

UNIT III - Various Sections in Library

Various sections in a Library- Routine work in Acquisition, Technical, Circulation, Maintenance, Reference and Binding Sections- Books selection: Need and purpose, Principles and theories, Book selection tools, Weeding out.

UNIT IV- Routine of the Periodical and Circulation Sections

Periodical selection, methods of subscription, recording methods and problems in periodical procurement- Charging and discharging methods- Maintenance: Shelving methods, shelf rectification, stock verification- Binding and preservation.

UNIT V- Library Governance

Library Governance- Library authority- Library committee, need and functions - Library manpower- staff formula. Library Ethics- Library Finance: Sources of finance; Budgeting techniques, cost benefit analysis, Human resources management.

Text Books

1. Mittal, R.L Library Administration: Theory and Practice. New Delhi: S.S Publication, 2007.
2. Kumar P.S.G. Management of Library and Information Centres.Delhi: B. R. Publishing corporation, 2003.
3. Panwar, B. S; Vyas, S. D. Library management, Delhi : B. R. Publisher, 1986.
4. Sharma, Lokesh. Library management, New Delhi :ShriSaiPrintographers, 2003.
5. Narayana, G. J. Library and information management. New Delhi : Prentice-Hall of India, 1991.
6. Ranganathan, S. R. Library Administration. ESS Publications, 2006.

Reference Books

1. Dutta, D N.Manual of library management, Calcutta The World Press Private Ltd. 1978.
2. Mookerjee, Subodh Kumar Library organisation and library administration, Calcutta: The world press private ltd. 1972.
3. Brophy, Peter and CourlingKote. Quality Management for Information and Library Managers. Bombay: Jaico, 1997.
4. Dragoon, A. "Knowledge Management: Rx for Success," CIO, 8(18), July 1995, pp. 48-56.
5. Due, R.T. "The Knowledge Economy," Information Systems Management, 12(3), Summer 1995, pp. 76-78.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1 https://www.mooc-list.com/length/3-weeks?page=23

2 https://www.mooc-list.com/?page=1%20

3 https://www.mooc-list.com/.../business-technology-management- specialization Course

Outcomes: The learner will be able to

CO No.	Course Outcomes	Cognitive Level
CO-1	outline the School of Management Thought; system analysis and design	K1,K2 &K3
CO-2	explain planning and decision making in Library Management	K2&K3
CO-3	analyze&evaluate Personnel Management &PERT	K2,K3,K4& K5
CO-4	appraise Organization Structure, organizational chart	K5
CO-5	justify the importance of quality, marketing and competitive analysis for the library and information management	K4& K5
CO-6	apply the Financial Management and evaluate the techniques involved in the Budgeting libraries on the basis of beneficiaries	K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome, Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	M	S	S	S	M	S
CO2	M	S	S	S	M	S	S	M	S	S
CO3	S	M	S	M	S	S	S	S	S	M
CO4	M	S	S	S	M	S	S	S	M	S
CO5	S	S	S	S	S	S	S	S	S	S
CO6	S	S	M	M	S	M	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LST13**	**INFORMATION SOURCES AND SERVICES**	**L**	**T**	**P**	**C**
CORE III			**5**	**-**	**-**	**4**

Course Objectives: To enable the learner to

CO No.	**Course objectives**
CO-1	remember, understand, and evaluate the types of Information Sources
CO-2	Remember and understand the Biographical Sources
CO-3	understand and apply the concepts of E-sources
CO-4	apply, analyse, and evaluate the different types of Information services
CO-5	comprehend Online Services

Unit I: Basics of Information Sources
Sources of Information: —Primary, Secondary and Tertiary—Documentary and Non-documentary –formal, informal sources. Difference between Primary, Secondary and Tertiary sources.Reference Sources—Encyclopaedias, Dictionaries, Geographical Sources.

Unit II: Biographical Sources
Biographical Sources: Year-books/Almanacs, Directories, and Handbooks, Statistical (salient features and evaluation) - Bibliographical Sources—Bibliographies, Union Catalogues, Indexing and Abstracting Journals (salient features and evaluation).

Unit III: Electronic Sources
Electronic Sources: E-books, E-journals, Databases- Bibliographic, Numeric and Full text—Evaluation CDs/DVDs, E-conference proceedings, E- Reports, E-Maps, E-Pictures/Photographs, E-Manuscripts, E-Theses, E-Newspaper, Internet/Websites - Listserv, Newsgroups, Subject Gateways, USENET.

Unit IV: Information Services
Information Services: Reference and Information Services, Referral Services, Bibliographic Service, Indexing and Abstracting Services, In-house Communications- Newsletters, House bulletins and other In-house communications; CAS, SDI, Digest Service, Trend Report, Translation Services, Reprographic Services.

Unit V: Online Services
Online Services: e-SDI, Literature search, Electronic document delivery and machine translation services; Bibliographic databases, Citation databases, Full-text databases, Portals and Gateways, Multimedia based information products, Open access knowledge system: products and services.

Text Books

1. Gopinath, M.A : Information Sources and Communication Media. Bangalore: DRTC Annual Seminar, 1984 .
2. Jogender Singh Burman, Libraries and Reference Services, New Delhi:Rajat Publications, 2007.
3. Madan Mohan Sinha Use of New Technology in Library Reference Services,New Delhi: Anmol Publications,2012,
4. S. K. Bajpai,Reference Services In Libraries, New Delhi:Friends Publications,2008,
5. Krishankumar, Reference service, 4th edition,New Delhi: Vikas, 1984.
6. Krishan, Gopal, Digital Libraries in Electronic Information Era, Authors Press, Delhi, 2000

Reference Books

1. Alan Poulter, Gwyneth Tseng and Goff Sargent : The Library and Information Professional's Guide to the World Wide Web. London : Facet Publishing, 1999.
2. G. G. Chowdhruy and SudattaChowdhury : Searching CD-ROM and Online Information Sources. London : Facet Publishing, 2001.
3. G. G. Chowdhury and SudattaChowdhury. Information Sources and Searching on the World Wide Web. London: Facet Publishing, 2001.
4. Girija Kumar and Krishan Kumar. Philosophy of User Education, New Delhi: Vikas, 1981.
5. Girijakumar and Krishan Kumar. Bibliography. Rev. ed. 3, New Delhi :Vikas, 1990.

6. Guha,B.Documentation and Information Services, Techniques and Systems, Calcutta :World Press,1983.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. eprints.rclis.org/19405/1/ALIS%2059(4)%20247-279%20(1).pdf
2. www.inflibnet.ac.in Epgpathsala
3. http://www.expertsmind.com/questions/qualities-of-indexing-andabstracting periodicals 30121941.aspx
4. www.ejil.org/about/services.php?

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	grasp the need for Information and its impact on society.	K1,K2
CO-2	understand the different types of Biographical sources.	K1,K2
CO-3	identify and apply the concept of E-resources.	K2,K3
CO-4	analyze and evaluate the different types of Information services.	K2,K3,K5
CO-5	evaluate the different online services.	K5
CO-6	apply information sources and services suited for specific information leads using employability skills and entrepreneurship.	K3

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

OUTCOME MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	S	S	M	S	S	S	S	M
CO2	S	S	S	S	M	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	M
CO4	M	S	S	M	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	M
CO6	S	S	M	M	S	M	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	P21LST14	KNOWLEDGE ORGANISATION (CLASSIFICATION THEORY)	L	T	P	C
CORE IV			5	-	-	4

Objectives: To enable the learner to

CO No.	Course Objectives
CO-1	understand the concept of knowledge organization.
CO-2	know the basic concepts of Information Retrieval Systems.
CO-3	understand the importance of various Information Retrieval Systems and techniques.
CO-4	be familiar with classification of subjects and assigning call numbers using DDC.
	comprehend the different theories of classification.
CO-6	To make the students familiar with classification of subjects and assigning call numbers using CC

Unit I :Universe of Knowledge

Universe of Knowledge: Nature, Attributes - Subject: Meaning, Types (Basic, Compound, Complex)- Modes of Subject Formation - Universe of Knowledge as Mapped in Different Classification Schemes (DDC and CC).

Unit II - Formation of subjects

Formation of subjects: Basic, Primary, Compound and Complex Subjects; Normative principles and their applications; Notation: Meaning, Need, Functions, Types, Qualities, Call number. Three plans of work.

Unit III - Laws of Classification

Concept, Purpose, Functions ;Theory of Library Classification; Knowledge Classification and Book Classification; Facet Analysis; Rounds and Levels; Common Isolates and auxiliaries: ACI and PCI and special; Postulate and Postulation Approach; array and chain, Devices, canons Law; Phase Relations.

Unit IV - Classification Schemes

Overview of Library Classification Schemes :DDC, UDC, CC and Broad system of Ordering (BSO) Structures and Features; Parts of Call Number.

Unit V - Current Trends

Trends and Future of Library Classification: Classification of Digital Resources; Recent Developments in Classification – Web Dewey, Role of Classification Research Group (CRG), Simple Knowledge Organization Systems (SKOS) - Automatic Classification, Taxonomies- Folksonomies.

Text Books

1. Bhattacharyya, G. Elements of POPSI. In: Rajan T.N., (ed.). Subject Indexing System. Calcutta:. IASLIC. 1981.
2. Ranganathan, S.R. Elements of Library Classification. 3rd ed. Bombay: Asia Publishing. 1962.
3. Krishna Kumar, Theory of Library Classification ERd.2,New Delhi: Vikas,1980.
4. Kumar :PSG. Knowledge Organization Information Processing and Retrieval theory Delhi: BR 2003.
5. Ramalingam,MS. Library Cataloguing and Classification System.Delhi:Kalpaz, 2000.

REFERENCE BOOKS

1) Krishan Kumar, Theory of Classification, New Delhi, Vikas publishing House,2000
2) S.R.Ranganathan, Colon Classification,6th ed. New Delhi , EssEss Publications, 1981
3) DDC Schedule, 22nd Ed. OCLC Online Computer Library Center, Inc. Dublin, Ohio
4) UDC Schedule. the UDC Consortium, The Hague (Netherlands), 1991.
5) Austin, D., PRECIS. A Manual of Concept Analysis. 2nd Ed. London: British Library. 1984
6) Austin, D. and Digger, J. PRECIS: The Preserved Context Index System. In: Chan, L.M., (ed.). Theory of Subject Analysis. Littleton Col.: Libraries Unlimited. pp. 369-89. 1985.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. http://epgp.inflibnet.ac.in/Home/ViewSubject?catid=21
2. https://www.tutorialspoint.com/public_library_management/public_library_management _knowledge_organization.htm

3. https://www.youtube.com/watch?v=ttFJZgNdryQ

Course Outcome

On completion of this course, the learners will be able to

CO No.	COURSE OUTCOMES	Cognitive level
CO-1	thorough knowledge of classification of subjects and assigning call numbers using CC	K2
CO-2	be familiar with classification of subjects and assigning call numbers using DDC	K2,K4,K5
CO-3	have thorough knowledge of classification of subjects and assigning call numbers using UDC	K2,K4,K5
CO-4	comprehend Classification of digital resources	K2, K3
CO-5	learn about Theory of Library classification	K2,K3,K4& K5
CO-6	apply and evaluate skills in classification with the practical knowledge acquired using employability skills and entrepreneurship skills	K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

Co/Po	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	M	S	S	S	M	S	M	S	S	S
CO2	S	S	S	S	M	S	M	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	M	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	M
CO6	S	S	M	M	S	M	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	P21LSP11	KNOWLEDGE ORGANISATION (CLASSIFICATION PRACTICE)	L	T	P	C
CORE V			-	-	6	4

Course Objectives

CO No.	Course Objectives
CO-1	The course will enable the students to gain knowledge on resource organization.
CO-2	to gain understanding of the main classes in DDC & CC.
CO-3	to properly organize the various knowledge resources.
CO-4	to position any reading material as per the desired classification.
CO-5	to observe and evaluate the arrangement of books in any known library.

Colon Classifications - Classification of Books and Periodicals according to CC (6th Edition)

Dewey Decimal Classifications - Classification of Books and periodicals according to DDC (22nd Edition)

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	Cognitive level
CO-1	understand the basic Dewey Decimal Classification system.	K1, K2
CO-2	understand the basic concepts of Colon Classifications system.	K1,K3
CO-3	have a thorough knowledge of Classification of knowledge organization.	K2,K3
CO-4	acquire knowledge about assigning call number on the basis of CC and DDC.	K3
CO-5	makeclassification of books and periodicals.	K2,K3

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

Co/Po	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	M	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	M	S	M	S	S
CO5	S	S	S	S	S	S	S	S	S	M

*S-Strong - 3; M-Medium - 2; L-Low - 1

SEMESTER – II

COURSE CODE	P21LST21	INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)	L	T	P	C
CORE VI			5	-	-	4

Course Objectives: To enable the learner

CO No.	Course Objectives
CO-1	to understand the Information Technology.
CO-2	to make the students be familiar with Computer Networks.
CO-3	to be familiar with Desktop Applications.
CO-4	to enable the students to know about the Computer Hardware.
CO-5	to understand the importance of Bibliographic Data Formats.

Unit I: Introduction to Information Technology

Introduction to Information Technology- Information Technology—Components; Impact of IT on Society – Computers—Hardware, Software, Storage Devices, Input/ Output Devices – Telecommunication—Transmission Media, Switching Systems, Bandwidth, Multiplexing, Modulation, Protocols, Wireless Communication. Fax, E-Mail, Tele-conferencing/video-conferencing, Bulletin Board Service, Teletext, Videotex, Voice Mail.

Unit II: Computer Networks

Computer Networks - Networking—Concepts, Network Architecture/topologies, Types—LAN, MAN and WAN Hypertext, Hypermedia, Multimedia- Integrated Services Digital Network (ISDN), Open Systems Interconnection –(OSI) - Network protocols and standards, Operating systems – windows, Linux.

Unit III: Desktop Applications

Desktop Applications Working with MS-Office, MS Access .Excel, PowerPoint, DTP work, word editor and media player, desktop application vs web application,Web Services,Console applications.

Unit IV : Multimedia Technology

Communication Technology: Telecommunication - Transmission Media: Switching, Bandwidth, Multiplexing, Modulation Protocols - Wireless Communication Tools and Techniques: Fax, Tele Conferencing, Video Conferencing, Teletext, Video Text and Bulletin Board Services.

Unit V:Web Technology

Web Technology: Web Browser, Search Engine, Hypertext, Hyper Media and Multimedia; Integrated Service Digital Network (ISDN) - Open System Inter Connections (OSI).

TEXT BOOKS

1.Dowlin, K. The electronic library. New York : Neal Schuman, 1984.

2. Forester, T., Ed. The Information Technology Revolution. Oxford: Blackwell, 1985.

3. Kelleher, Kathleen & Cross, Thomas B. Teleconferencing: Linking Propel together Electronically. Englewood Cliffs: Prentice-Hall, 1985.

4. King, Donald W., ed. Telecommunications and Libraries: a Primer for Libraries and Information Managers. White Plains : Knowledge Industry, 1981.

5. Vervest, Peter. Electronic Mail and Message Handling. London: Printer, 1985.

6. Zorkoczy, Peter and Heap, Nicholas. Information Technology: an Introduction. 4th ed. London: Pitman, 1995.

7. The Hindu Speaks on Information Technology. Madras :Kasturi& Sons, 1993.

REFERENCES BOOKS

1) Mahapatra, P.K. The Computer in Library Services, Word Press, Calcutta, 1985.
2) Kausik Bose Information Networks in India: Problems and Prospects / New Delhi: EssEssPublications, 1994.
3) Satyanarayana, N.R. A Manual of Computerization of Libraries. New Delhi: ViswaPrakashan, 1995.
4) ShyamaBalakrishnan and P.K. Paliwal, Eds. Library Automated Acquistion, Anmol publications Pvt. Ltd., New Delhi, 2001.
5) Anita Rosen, E-Learning 2.0 : Proven Practices and Emerging Technologies, Reference Press, New Delhi, 2011.
6) Rajasekaran L, Digital Library Basics: A practical Manual, EssEss, New Delhi, 2010.

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	Cognitive level
CO-1	understand the Information Technology.	K1, K2
CO-2	understand the basic concepts of Computer Networks.	K1,K3
CO-3	work with Desktop Applications Working with MS-Office.	K2,K3
CO-4	have thorough knowledge about Computer Hardware.	K3
CO-5	know about Bibliographic Data Formats- Library Automation.	K2,K3

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

Co/Po	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	M	S	S
CO2	M	S	S	S	M	S	M	S	S	S
CO3	S	M	S	S	S	S	S	S	M	S
CO4	S	M	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LST22**	**KNOWLEDGE MANAGEMENT**	**L**	**T**	**P**	**C**
CORE VII			**5**	**-**	**-**	**4**

Course Objectives: The course has been designed to

CO No.	Course Objectives
CO-1	make the students know the concepts and types of Knowledge Management.
CO-2	familiarizethe students with the knowledge management practices and process in libraries.
CO-3	enable the students to understand the concept and study of subjects.
CO-4	impart the knowledge about the structure, features, and models of formation of subjects

Unit –I - Introduction to Knowledge Management

Knowledge Management;Conceptand Definitions;Need for Knowledge Management in the emerging andchanging business environment – Understanding Knowledge; Types of knowledge ExplicitandTacitKnowledge –Knowledgeworkers –

changingroleoflibraryinformationprofessionals.

Unit-II - Creation and Capturing

Knowledge Creation and Capturing:Externalization and internalization Knowledge creation Model -Artificial Intelligence tradition, an expert system, perform as human expert, – Capturing tacit knowledge, knowledge acquisition, interviewing, protocol analyse, questionnaire and surveys and observation and simulation.

Unit –III- Knowledge Codification and Organization

Knowledge Codification and Organization: Capturing, Involving, Scanning, Organizing, and Packaging knowledge.Principle of knowledge codification. Identifying existing knowledge, evaluate existing knowledge. StrategicKnowledge mapping, decision trees, decision tables.

Unit – IV - Knowledge Management Tools and techniques and Transfer and Sharing

Knowledge Management Tools and Techniques: Portal, e-learning, Community of Practice, Storytelling.Knowledge Transfer and Sharing- Steps in Knowledge transfer;Knowledge transfer e-world,Role ofInternet, e-Business/E-commerce.

Unit –V - Tools for Knowledge Management

Tools for Knowledge Management–NeuralNetworksDatamining-LegalandethicalissuesinKnowledge Management, cultural issues in knowledge management, knowledge management strategies, knowledge management system and knowledge management culture.

Text books:

1. Kumar, P.S.G. Knowledge Organization, Information Processing and Retrieval, Delhi, B.R.Publisher, 2003.
2. Mruthyunjaya, Knowledge Management, New Delhi: PHI Learning Pvt., Ltd., 2001
3. Bhunia, C.T. , Introduction to Knowledge Management, New Delhi: Everest Publishing House, 2003
4. Singh, S.K. Essentials of Integrated Library Management, New Delhi: Authors Press, 2002

References

1. Michael, E.D. Koenig,Knowledge Management Lessons Learned, New Delhi, EssEss Publications,2008
2. Al-Hawamdeh, Suliman. Knowledge Management : cultivating knowledge professionals. Oxford :Chandos Publ.2003
3. Arvidsson, Niklas. Knowledge management in the Multinational enterprise. p.176-163 IN The Flexible firm : capability management in network organizations/edited by Julian 2000
4. Holsapple, Clyde W. (ed.). Handbook on Knowledge Management 1 : Knowledge Matters. New Delhi : Springer, 2003
5. Holsapple, Clyde W. (ed.). Handbook on Knowledge Management 2: Knowledge Directions/(editor). New Delhi : Springer their identification; information seeking behavior, 2003

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://www.mooc-list.com/university-entity/hkpolyux
2. https://www.mooc-list.com/tags/public-library
3. https://www.mooc-list.com/tags/knowledge-managemen

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	Cognitive level
CO-1	understandKnowledge Management: Concept and definitions – Need, Types.	K1, K2
CO-2	know about Knowledge creation and capturing.	K1,K3
CO-3	comprehendKnowledge codification and organization.	K2,K3
CO-4	have thorough understanding of Knowledge Management Tools and techniques.	K3
CO-5	undertakeCase studies – Corporate and Special Libraries.	K2,K3

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

Co/Po	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	M	S	S
CO2	M	S	S	S	M	S	M	S	S	S
CO3	S	M	S	S	S	S	S	S	M	S
CO4	S	M	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LST23**	**INFORMATION NEED ASSESSMENT AND INFORMATION SEEKING BEHAVIOUR**	**L**	**T**	**P**	**C**
CORE VIII			**4**	**-**	**-**	**4**

Course Objectives: To enable the students to

CO No.	**Course Objectives**
CO-1	understand information seeking behaviours and User information need and thus, to design library services.
CO-2	understand the techniques of assessing user needs and behaviours.
CO-3	befamiliar with the various information needs of the user.

CO-4	befamiliar with information literacy.
CO-5	understand the evaluation methods of user studies.

UNIT I – User Studies

User Studies – Concept, Definition,and purpose-types and Techniques. Understanding user behaviors, needs, and motivations through observation techniques, task analysis, and other feedback methodologies,advantages and disadvantages.

UNIT II – Information Needs

Information Needs –Types,General information need, social information need, group information need and individual information need - Information seeking behavior - Models. Information retrieval, difference contexts, Theories of information-seeking behavior, model of conceptual.

UNIT III - Information Literacy

Information Literacy - Concept - definition - methods, andObjectives of information literacy, special aspect of information literacy, need for information literacy, digital information literacy, media information literacy, information and information literacy.Empoweringeight models of information literacy.Evaluation of Information Literacy Programmes.

UNIT IV - Trends in Information Literacy

Information Literacy skills and Competencies: Challenges of Information literacy Programs. Information literacy initiatives in global perspective- Trends in Information Literacy: Current trends in Information literacy. Information Literacy and Lifelong learning, Information literacy in India.

UNIT V - User Education

User education – Need – Purpose – Methods - online user education - Evaluation of user educationprogrammes.-impact of information and communication technology in education, role of libraries in higher education, impact of e-resources and services on higher education and research.

Text Books

1. Kumar, PSG. Use and User studies Publication. New Delhi: BR Publication, 2006.
2. Deverajan. User studies, New Delhi :Allied publishers, 1987.
3. Ercegovac, Zorana , Information Literacy: Search Strategies, Tools & Resources for High School Students and College Freshman, California: ABC-CLIO.2008.

Reference

1. Kumar, PSG. A student's Manual of Library and Information Science. New Delhi: BR. Publishers, 2002.
2. Kumar, PSG. Library and Users: Theory and Practice. New Delhi: BR. Publishers, 2004.
3. Sridhar, MS. Library Use and User Research (with twenty case studies). New Delhi: Concept Publishing Company, 2002.
4. Barker, K. and Londsale, R. Ed., Skills for Life: the Value and Meaning of Literacy. London: Taylor Graham. 1994.
5. Eisenberg, Michael B., Lowe, Carrie, A. and Spitzer, Kathleen L., Information literacy: Essential Skills for Information Age. London: Libraries Unlimited. 2004

6. Meadows, A.J. Ed., Knowledge and Communication: Essays on the Information Chain. London : Library Association Publishing. 1991.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. American Library Association. Final Report of Presidential committee on information Literacy. www.ala.org/at/nill/littls.html
2. Bawden, D.(2001). Information and digital literacy: a review of concepts. http://arizona.openrepository.com/arizona/bitstream/10150/105803/1/bawden.pdf
3. http://portal.unesco.org/edu
4. http://www.ifla.org

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	Cognitive level
CO-1	understand the user need.	K1, K2
CO-2	gain understanding of the information types of various user.	K1,K3
CO-3	acquire knowledge about Information literacy and its evaluation.	K2,K3
CO-4	have knowledge about User education and its evaluation.	K3
CO-5	makeEvaluation of user studies.	K2,K3

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	M	S	S
CO2	M	S	S	S	M	S	M	S	S	S
CO3	S	M	S	S	S	S	S	S	M	M
CO4	S	M	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LST24**	**KNOWLEDGE ORGANISATION (CATALOGUING THEORY)**	**L**	**T**	**P**	**C**
CORE IX			**4**	**-**	**-**	**4**

Course Objectives: To enable the students to

CO No.	Course Objectives
CO-1	understand the importance of various Information Retrieval Systems and techniques.
CO-2	toget acquainted with different cataloguing codes and to know various standard

	bibliographic formats.
CO-3	acquirethe skills in cataloguing of books and non book materials according to CCC.
CO-4	acquire the skills in cataloguing of books and non book materials according to AACR II.

Unit I: Library Catalogue and Law

Library Cataloguing –introduction, evolution, Need, Purpose and Functions; Centralized and Co-operative Cataloguing, Descriptive Vs. Limited Cataloging, Arrangement and Filing of Entries. Law of Catalogue: Normative Principles of Cataloging -Canons Laws Principles and their Implications.

Unit II: Type of Catalogues and Rules

Cataloguing Rules, types of Catalogues – Physical Forms and machine readable (Web OPAC) catalogue advantages and disadvantages, Inner forms (Dictionary, Classified and Alphabetical) of Catalogue – overview of AACR-II, MARC21, Dublin Core, ISBD, CCF and RDA (Resource Description and Access), Subject Catalogues, Sear's List Chain Indexing. subject heading lists; thesauri and vocabulary control.

Unit III: Subject Catalogues

Subject catalogues - Sears' List of subject headings; Indexing Languages - Pre-coordinate and Post-Coordinate Indexing, Chain indexing, Uni term Indexing, PRECIS, POPSI, KWIC, KWOC – Citation Indexing. Library catalogue, dictionary catalogue.

Unit IV: Catalogue Arrangement

Centralized and Co-operative Cataloguing - Union Catalogue- Arrangement and Filing of Entries.Organization of digital resources Metadata standards Dublin core, Mark up languages; DOI (Digital Object identifier).

Unit V: Catalogue Standards and Recent Trends

Formats and Standards – ISBDs; MARC, 21 Dublin Core, ISO 2709 UNIMARC, CCF and National formats.

Recent trends– WorldCataloguing (WorldCat), India Cataloguing(Indcat) , Pre-Natal Cataloguing, Cataloging in Publication, Union Catalogue.

Text Books

1. Anglo-American Cataloguing Rules., 2nd rev. ed. Chicago: American Library Association. 1988.
2. Bhattacharyya, G., Elements of POPSI. In: Rajan T.N., (ed.). Subject Indexing System. Calcutta:. IASLIC. 1981.
3. Coates, E.J., Subject Catalogues. London: Library Association. 1988
4. KishanKumar , Theory of Cataloguing. New Delhi: Har-Anand. 1993.

5. Ranganathan, S.R., Classified Catalogue Code with Additional Rules for Dictionary-Catalogue. 5th ed. reprint. Bangalore: SaradaRanganathan Endowment for Library Science, 1992.
6. Sen Gupta, B., Cataloguing: Its Theory and Practice. 3 rd ed. Calcutta: World Press,1974.

Reference Books

1) Krishan Kumar and Grija Kumar, Theory of Cataloguing, New Delhi: Vikas Publishing House 2002
2) C. Lal& K. Kumar, Practical Cataloguing AACR-2, New Delhi: EssEss Publications, 2006
3) Austin, D. and Digger, J. PRECIS: The Preserved Context Index System. In: Chan, L.M., (ed.). Theory of Subject Analysis. Littleton Col.: Libraries Unlimited. 1985. pp. 369-389.
4) Chan, Lois Mai Cataloguing and Classification: An Introduction. 2nd ed. New York : McGraw-Hill,1994.
5) Chan, Lois Mai [et al.] Dewey Decimal Classification: A Practical Guide. 2nd ed. revision for DDC-21. Albany, New York: Forest Press/OCLC, 1996. pp. 1-24.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. http://epgp.inflibnet.ac.in/Home/ViewSubject?catid=21
2. https://www.tutorialspoint.com/public_library_management/public_library_management_k nowledge_organization.htm
3. https://www.youtube.com/watch?v=ttFJZgNdryQ

Course Outcome

The students will be able to

CO No.	COURSE OUTCOMES	Cognitive level
CO-1	practice with cataloguing of subjects and assigning call numbers using CCC.	K2
CO-2	practice with cataloguing of subjects and assigning call numbers using AACR-II.	K2,K4,K5
CO-3	get knowledge about LCSH and SLSH.	K2,K4,K5
CO-4	practice the skills in cataloguing of books and non book materials according to CCC, AACR-II.	K2, K3
CO-5	apply and evaluate skills in cataloguing by the practical knowledge acquired using employability skills and entrepreneurship skills.	K2,K3,K4& K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2).

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	M	S	S	S	M	S	M	S	S	S
CO2	S	S	S	S	M	S	M	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	M	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	M

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	P21LSP22	KNOWLEDGE ORGANISATION (CATALOGUING PRACTICE)	L	T	P	C
CORE X			-	-	6	4

Course Objectives: The learner will be able to

CO No.	Course Objectives
CO-1	know about the "Knowledge organization. "
CO-2	understand the importance of " Information Retrieval Systems: by various cataloguing methods.
CO-3	catalogue the Library documents through AACR – II.
CO-4	applythe skills in cataloguing of books and non book materials according to CCC.
CO-5	apply the skills in cataloguing of books and non book materials according to AACR II.

Course Content: Cataloguing of Books and Periodicals according to Classified Catalogue Code- (CCC) and AACR-II) Last Edition).

Course Outcomes: The learner will be able to

CO No.	Course Outcomes	Cognitive Level
CO-1	classifythe different types of documents.	K2
CO-2	classification Print and Non Print documents using CCC.	K2,K3
CO-3	have knowledge about Preparation of Subject Heading using SEARS List.	K3,K4
CO-4	classify with the help of AACR-II.	K2
CO-5	know about Bibliographical data exchange format.	K2,K4,K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2).

Outcome Mapping

Co/Po	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	M	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	M
CO3	S	S	S	S	M	M	S	S	S	S
CO4	S	S	S	S	S	S	M	S	S	S
CO5	S	M	S	S	S	S	M	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	P21LSS22	E-RESOURCES MANAGEMENT	L	T	P	C
SUPPORTIVE COURSE II(SKILL)			2	-	-	2

Objectives: To enable the students

CO No.	Course Objectives
CO-1	to be familiar with the historical development of Electronic Resources.
CO-2	be acquainted with various format of electronic resources.
CO-3	to be aware of online search strategy and search engines.
CO-4	be knowledgeable with E-Resources Consortia for Resource Sharing.
CO-5	get training inHands-on Experience on metadata databases.

Unit I - E-Resources
Introduction and Basic Concepts of E-Resources - History and development of E-Resources.

Unit:2 Format of E-Resources
Format of E-resources: - E-journals, characteristics, advantages and disadvantages -E-book, characteristics, advantages and disadvantages -Online Databases, characteristics, advantages and disadvantages.

Unit:3 Search Strategy
Search Techniques, Search Strategy, Meta data Harvesting , Web Crawling.

Unit:4 E-Resources Consortia for Resource Sharing
UGC-INFLIBNET - DeLCON consortia, International: OCLC.

Unit:5 Hands-on Experience
PubMed-JSTOR – J-Gate – Web of Science – IEEE – Scopus
Registration, how to search, search strategy.

Text Books

1. Armbrust, M., Fox, A., Friffith, R., (et. al.) Above the clouds: a Berkeley view of Cloud computing,2009
2. Chepesuik, R. The future is here: America's libraries go digital. American Libraries, 2(1),1997.
3. Chowdhury, G, & Foo, S. Digital Libraries and Open Access. In Chowdhury, G, & Foo, S. (Eds). Digital libraries and information access: Research perspectives,UK: Facet Publishing,2012.
4. Dickson, G.W. and Desanctis, G.. Information technology and the future enterprise: New models for managers. New Jersey: Prentice Hall,2000.
5. Chavare, S. R. Co-Operation For Resource Sharing: Initiatives, Models and Techniques, Workshop on Information Resource Management 13th-15th March, DRTC, Bangalore, Paper: BB,2002.

Reference Books:

1. Butler, J. G., *Information technology: Converging strategies and trends for the 21st century*. Computer Technology Research, 1997
2. Ram, C. S., *Information technology in developing human resources*. Deep and Deep Publications, 2010
3. RAY, A. K., & ACHARYA, T. *Information technology: Principles and applications*. PHI Learning Pvt, 2004.
4. Shiva Sukula,Electronic Resource Management What Why and How, New Delhi:EssEss ,2010.
5. BhojarajuGunjal, DibyaKishorPradhan, DhanwantariPrakashTripathi,
6. VinodkumarMishra,et.al. New Delhi:Ess Ess,2016.

Reference link:

1. https://www.ifla.org/files/assets/acquisition-collection development/publications/electronic-resource-guide-2012.pdf
   http://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/library_and_information_science/information_sources,_systems_and_services/04._reference_sources__use__and_evaluation_criteria,__e-information_sources/et/1916_et_et.pdf
   https://ess.inflibnet.ac.in/
2. Technical report No. UCB/EECS-2009-28. Available at, http://www.eecs.berkeley.edu/Pubs/TechRpts/2009/EECS-2009-28.html.
   Association of Research Libraries (1995), "Definition and purposes of a digital library", available at:www.arl.org/sunsite/definition.html.
   Budapest Open Access Initiative. Available online at http://www.soros.org/openaccess/read.
   Directory of Open access Repositories. http://www.opendoar.org/.
3. American Library Association. Scholarly communication tool kit. (http://www.ala.org/ala/acrl/acrlissues/scholarlycomm/scholarlycommunicationtoolkit/to olkit.cfm).

Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	acquirefamiliarity with historical development of electronic resources and various formats of e-resources.	K2
CO-2	gainknowledge about various search strategy and search Engines.	K2,K3
CO-3	have understanding of Resource consortia and Resource Sharing.	K2,K3,K5
CO-4	practice on Databases of Library Science.	K3,K4&K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2).

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	M	S	S	S	S	S	S
CO2	S	S	S	S	M	S	S	S	S	S
CO3	S	S	S	S	M	S	M	S	S	S
CO4	S	M	M	S	S	S	S	S	M	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

SEMESTER – III

COURSE CODE	P21LST31	RESEARCH METHODS AND TECHNIQUES	L	T	P	C
CORE XI			5	-	-	4

Course Objectives: To enable the learners to

CO No.	Course Objectives
CO-1	know the basic concept of the research
CO-2	gain knowledge of the research process
CO-3	apply suitable research methods & techniques to solve library management problems and issues
CO-4	develop necessary critical thinking skills in order to evaluate different research approaches utilized in the library services
CO-5	demonstrate knowledge and understanding of data analysis and interpretation in relation to the research process.

Unit I- Basics of Research

Concept, Definition, Objectives, Types and Significance – Research Problem – Identification, Selection and Formulation – Literature Review – Sources, Process, and Limitations – Logic and Scientific Method.

Unit II- Research Design

Definition, Need, Types and Components – Hypothesis – Definition, Formulation, Types and Testing – Sampling – Concept and Need of study population and Sampling, Types of Sampling Techniques – Probability and Non- Probability, Derivation of Sample, Sample Bias and Error – Preparation of a Research Proposal – Components and Steps.

Unit III- Methods and Tools

Survey, Experimental, Case-study, Historical, and Scientific – Sources of Data – Primary, Secondary, and Tertiary – Data Collection Tools - Questionnaire, Interview, Observation, Delphi – Measures and Scaling Techniques.

Unit IV Statistical Tools

Need and Importance, Descriptive and Inferential Statistics – Measures of Central Tendency – Standard Deviation – T-Test, Chi-Square, ANOVA, Correlation Analysis – Introduction to SPSS and its applications.

Unit V Presentation and Reporting

Presentation of Data-Tables, Charts and Figures- Interpretation, Inferences-Deductive and InductiveReport Writing- Components and Evaluation of a Research Report- Style Manuals-Chicago, MLA, APA – Introduction to Reference Manager – Ethics in Research and Publication. Trends in Library and Information Science Research-Metric Studies in LIS -

Bibliometrics, Scientometric, Webometrics, Informetrics and Altmetrics-Impact Factors-Journal, Institutional and Authors; h-Index, g-Index, i10 Index.

Text Books:

1) Kothari.C.R. Research methodology: Ed2 New Delhi ,Wishwa, 1990.
2) Krishna Kumar: Research methods in library in social science. New Delhi:Vikas, 1992

Reference books:

1. Krishna Swamy, O.R. Methodology of research in social sciences. Bombay:Himalaya, , 1993
2.Line,Maurice.B. Library surveys; An introduction to the use, planning procedure and presentation of survey. Ed2, London: Clive Bingley, 1982:
3. RavichandraRao, I.K. Quantitative methods in library and information science, New Delhi, Wiley Eastern. 1988
4.Leedy, Paul, D. and Ormrod Jeanne Ellis, Practical research: planning and design, Colorado:University of northern, 2016
5.Slatter, Margaret, Research, methods in library and information science. London: L.A, 1990.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://onlinecourses.swayam2.ac.in/cec20_mg14/preview

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	understand basic concept of research and the different methods of Research.	K1, K2
CO-2	gain knowledge of the research process.	K2
CO-3	apply suitable research methods & techniques to solve library management problems and issues.	K2,K4
CO-4	develop necessary critical thinking skills in order to evaluate different research approaches utilized in the library services.	K4,K5
CO-5	demonstrate knowledge and understanding of data analysis and interpretation in relation to the research process.	K3,K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2).

Outcome Mapping

Co/Po	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	M	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	P21LST32	DIGITAL LIBRARIES	L	T	P	C
CORE XII			5	-	-	4

Course Objectives: To enable the learners to

CO No.	Course Objectives
CO-1	study the objectives and scope of digital Libraries.
CO-2	make the students understand the digital library software.
CO-3	inculcate the knowledge on digitization process.
CO-4	befamiliar with digital library software GSDL, Dspace.

UNIT I Digital Libraries

Digital Libraries :Introduction of Digital libraries,: meaning and definition, types of digital libraries, features of digital libraries, information network and digital libraries.Concept and definition; Historical development of Digital Libraries.Copyright and license issues.

UNIT II Digitization Process

Digitization Process: Software, hardware and best practices; Scanners and scanner types; Optical Character Recognition and OCR software; digitization and digital preservation, concept of digitization and digital library. Digitization of print based document, video digitization, audio digitization.

Unit-III - Design and organization of digital libraries

Design and organization of digital libraries: digital content delivery through Document Delivery Service,Major Digital Library projects in India, digital library initiatives, interoperability, protocols and standards, study of Digital library softwares, digital content creation:file formats and archives.

UNIT IV Technology for Digital Libraries

Technology for Digital Libraries: Open source software; Dspace, GSDL : Features and comparative study of D-space, Eprints and Fedora; Open Standards and File formats, Harvesting metadata, OAIPMH and DL Interoperability

UNIT V Digital Library Architecture;

Digital Library Architecture; Grid architecture. Open URL integration. Digital Preservation : Persistent identifiers : DOI and CNRI Handles; Multilingual digital repositories and Crosslanguage information retrieval

Text Books

1. Andrew Cox.Introduction to Digital Library Management. London: Facet Publishing. 2010.
2. Andrews, J. Digital Libraries. London: Ashgate.2010.

Reference :

1) Lesk, Michael. Understanding Digital Libraries. 2nd edition. USA : Elsevier, 2005.
2) Witten Ian H., Bainbridge, David [and] Nichols, David M. How to build a digital library. 2nd Edition. Elsevier Publications. 2010.
3) Kresh, Diane. The whole digital library handbook. USA: Council on Library and Information Resource, 2007.
4) Karen, Calhoun. Exploring digital libraries. Neal Schuman Publishers, 2014.
5) Chowdhury, G.G.. Introduction to Digital Libraries. London: Facet Publishing. 2003.
6) Digital Libraries in Theory and Practices (Course pack)by Dr. Yan Quan Liu | 1 July 2016
7) Vijay Lakshmi &S.C.Jindal Digital Libraries V1,V2, & V3 Delhi, IshaBooks,2004.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

http://epgp.inflibnet.ac.in/Home/ViewSubject?catid=21
https://www.tutorialspoint.com/public_library_management/public_library_management_k n owledge_organization.htm
https://www.youtube.com/watch?v=ttFJZgNdryQ

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	study the objectives and scope of digital Libraries.	K1, K2
CO-2	understand the digital library softwares.	K2
CO-3	befamiliar with digital library software GSDL, Dspace.	K2,K4
CO-4	inculcate the knowledge on digitization process.	K4,K5
CO-5	Have understanding of application of digital library software.	K3,K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2).

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	M	S	S	S	S	S	S
CO5	M	S	S	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	P21LST33	ROBOTIC PROCESS AUTOMATION FOR LIBRARY	L	T	P	C
CORE XIII			4	-	-	4

Course Objectives: To enable the learners to

CO No.	Course objectives
CO-1	be Aware of the concept of Robotic Process Automation and its implications.
CO-2	know about Introduction to Library automation.
CO-3	deviseplanning for automation, managing library automation.
CO-4	learn about Evaluation of library automation.
CO-5	know about Library automation softwares, and its evaluation.

Unit I: Introduction to Robotic Process

Introduction to RPA - Overview of RPA - Benefits of RPA in a business environment - Industries & domains fit for RPA - Identification of process for automation - Types of Robots - Ethics of RPA & Best Practices - Automation and RPA Concepts - Different business models for implementing RPA - Centre of Excellence – Types and their applications - Building an RPA team - Approach for implementing RPA initiatives.

Unit II: Introduction to Library Automation

Library automation: Definition, Need, Purpose and Advantages. Historical development.AutomationVs Mechanization.Installation of Automation Software.Areas of Automation – Acquisition, Cataloguing, Access to Catalogue (Online Public Access Catalogue), Circulation and Serial Control.

Unit III:Planning for Automation and Management of Library Automation

Planning for Library automation - Automation of Library operations.Acquisitions, Cataloguing, OPACs, Circulation and Serials control.

Management of Library Automation: Planning, Data, Formats and Standards – ISO 2709, MARC21, Z39.50 - Retrospective Conversion, Implementation and Evaluation.Computerized Information Services: Alerting Services, Bibliographic Services, Document Delivery Services and Reference Services.

Unit IV: Evaluation and Applications

Evaluation of Library automation systems.Criteria for evaluation.Evaluation techniques.Study of standards relevant to Library automation.Application of Barcode and RFID Technology for Library Functions - Application of Artificial Intelligence to Library and Information Centre.

Unit V: Library automation Software

Library / Bibliographic application software, Reference management software, citation management software and bibliographical management software- Koha, SOUL :Module, Advantage and Disadvantage, Features, Boolean Search - Evaluation of Library automation software.

Text Books:

1. Rajiv Paithankar, Academic Library Automation, A B D Publishers, 2012
2. R. Raman Nair. Academic Library Automation. EssEss Publication. 1995
3. N.R. Satyanarayana (A Manual of Library Automation and Networking (Thoroughly Revised and Enlarged 3rd Edition) EssEss Publication,2014.
4. Cooper, Michael D. Design of Library Automation Systems: File Structures, Data Structures, and Tools. New York: Wiley & Sons, 1996.

Reference Books

1) Cortez, E. M. and Smorch, T. Planning Second Generation Automated Library. Westport, CT: Greenwood Press, 1993.
2) RavichandraRao, I.K. Library Automation. New Delhi: Wiley Eastern Ltd.,1990.
3) Rowley, J.: The electronic library. 4th ed. London: Library Association, 1998.
4) Planning for library automation: A Practical Handbook / John M. Cohn, Ann L. Kelsey and Keith Michael Fiels – London : Library Association, 1998.
5) Alok Mani Tripathi, Learning Robotic Process Automation, Packt Publishing, 2018
6) Pandey S K Sharma, Fundamentals of Library Automation,New Delhi: ESS ESS, 2011

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://www.uipath.com/landing/academic-studio-download
2. https://www.uipath.com/rpa/robotic-process-automation
3. https://www.uipath.com/rpa/academy
4. www.tandfonline.com
5. www.clib.dauniv.ac.in
6. https://www.ijsr.net/archive/v4i3/SUB152317.pdf

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	be aware of the concept of Robotic Process Automation and its implications.	K4
CO-2	gain knowledge about Library automation.	K3
CO-3	plan for automation, manage library automation.	K3
CO-4	evaluate of library automationbest practices.	K5
CO-5	library automation software, and its evaluation.	K3&K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2).

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5

CO1	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	M	S	S	M	S	M
CO4	S	S	S	M	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LST34**	**INTRODUCTION TO INDUSTRY 4.0**	**L**	**T**	**P**	**C**
CORE XIV			**4**	**-**	**-**	**4**

Course Objectives: To enable the learners to

CO No.	Course Objectives
CO-1	remember the technologies of industry 4.0.
CO-2	understand the societal influence of Artificial Intelligence.
CO-3	apply the Big Data in Industry 4.0.
CO-4	analyze the Internet of Things.
CO-5	create and evaluate the Education 4.0.

Unit I Industry 4.0

Need – Reason for Adopting Industry 4.0 - Definition – Goals and Design Principles - Technologies of Industry 4.0 – Big Data – Artificial Intelligence (AI) – Industrial Internet of Things - Cyber Security – Cloud – Augmented Reality.

Unit:II Artificial Intelligence

Artificial Intelligence: Artificial Intelligence (AI) – What & Why? - History of AI - Foundations of AI -The AI - environment - Societal Influences of AI - Application Domains and Tools - Associated Technologies of AI - Future Prospects of AI - Challenges of AI.

Unit:III Big Data and IoT

Big Data : Evolution - Data Evolution - Data : Terminologies - Big Data Definitions - Essential of Big Data in Industry 4.0 - Big Data Merits and Advantages - Big Data Components : Big Data Characteristics - Big Data Processing Frameworks - Big Data Applications - Big Data Tools - Big Data Domain Stack : Big Data in Data Science - Big Data in IoT - Big Data in Machine Learning - Big Data in Databases - Big Data Use cases: Big Data in Social Causes - Big Data for Industry -Big Data Roles and Skills -Big Data Roles - Learning Platforms; Internet of Things (IoT) : Introduction to IoT - Architecture of IoT - Technologies for IoT - Developing IoT Applications - Applications of IoT - Security in IoT.

Unit:IV Applications and Tools of Industry 4.0

Applications of IoT – Manufacturing – Healthcare – Education – Aerospace and Defense – Agriculture – Transportation and Logistics – Impact of Industry 4.0 on Society: Impact on Business, Government, People. Tools for Artificial Intelligence, Big Data and Data Analytics, Virtual Reality, Augmented Reality, IoT, Robotics.

Unit V- Jobs 2030

Industry 4.0 – Education 4.0 – Curriculum 4.0 – Faculty 4.0 – Skills required for Future - Tools for Education – Artificial Intelligence Jobs in 2030 – Jobs 2030 - Framework for aligning Education with Industry 4.0.

Text Books

1) Kaliraj.PandDevi.T, Higher Education for Industry 4.0 and Transformation to Education 5.0, 2020**.**
2) PhiriChigwada, Joseline and Ngozi Maria Nwaohiri (ed.)Examining the impact of Industry 4.0 on academic libraries, First Edition, Emerald,2021

Reference books

1. Alasdair Gilchrist, Industry 4.0: The Industrial Internet of Things, New York:Apress Media LLC, 2017.
2. Klaus Schwab, The Fourth Industrial Revolution, Portfolio, UK: Penguin, 2017.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. https://www.mooc-list.com/tags/industry-4.0
2. https://www.mooc-list.com/course/hands-industrie-40-moochouse
3. https://www.mooc-list.com/tags/iot

Course Outcomes: The learner will be able to

CO	COURSE OUTCOMEs	COGNITIVE

No.		LEVEL
CO-1	understand the technologies of industry 4.0.	K1, K2
CO-2	havefamiliarity with the societal influence of Artificial Intelligence.	K2
CO-3	understand the Big Data in Industry 4.0.	K2,K4
CO-4	analyze the Internet of Things.	K4,K5
CO-5	to create and evaluate the Education 4.0.	Ks,K5

Note: K1- Remembering; K2 – Understanding; K3 -Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2).

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	M	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LST35**	**METRIC STUDY**	**L**	**T**	**P**	**C**
CORE XV			**4**	**-**	**-**	**4**

Course Objectives: To enable the learners to

CO No.	Course Objectives
CO-1	get familiarity with metric studies
CO-2	understand the concept, theories, laws and parameters of Bibliometrics, Informatics, Webometrics, Librametricsand Scientometrics.
CO-3	learn about the citation analysis operation research.
CO-4	learn about the application of Bibliometrics to study the literature in different subjects.
CO-5	understandthe emerging trends in informatics and Scientometrics.

Unit –I - Metrics Evaluation
Meaning, Features, Biblimetrics, Librametrics, Scientometrics, Informetrics, Webometrics, Cyber metrics and Altmetrics: Concept, definition, evolution and applications in Libraries.

Unit –II - Law`s
Laws and Application of Bibliometrics, Other Empirical Laws of Price, Garfield, Sengupta, etc,Theory and Laws - Zipf's law, Lotka's Law, Bradford's Law. Price Theory

Unit – III Quantitative and Qualitative techniques
Quantitative and Qualitative techniques: Types, Multidimensional scaling, Cluster analysis, Correspondence analysis, Co-word analysis, media and audience analysis.

Unit –IV Citation Theory and Analysis
Citation Theory and Analysis; Definition, Theory of citing, different forms of citations, Bibliographic Coupling, Age of citation – citation counts , Self –citation – Citation Index _ Impact Factor – H Index

Unit – V Emerging Trends
Emerging Trends: Webometrics, Altmetrics, Analysis Tools (Hitscite and Bibexcel, PAJEK, VOS Viewer)Biblimetric tools: Web of Science, SCOPUS, MEDLINE, Google Scholar, Pop, and EBSCHO.

Text Books

1. Braam, Robert R. Mapping of science: Foci of intellectual interest in scientific literature. DSWO Press.1991.
2. De Bellis, Nicola. Bibliometrics and citation analysis: from the Science citation index to cybermetrics. Scarecrow Press.2009.
3. Leydesdorff, L. A. The challenge of Scientometrics: The development, measurement, and self-organization of scientific communications (2nd ed.). Boca Raton, FL: Universal Publishers,2001.
4. Wolfram, D. Applied Informetrics for Information Retrieval Research. London, Libraries Unlimited,2003.

Reference Books

1. Bollen, J, Van de Sompel.H and Smith.J.Acitation-based, author- and age-normalized, logarithmic index for evaluation of individual researchers independently of publication counts. SCMS Journal of Indian Management, volXIV, 2017.
2. Egghe, Leo; Rousseau, Ronald. Introduction to Informetrics: Quantitative Methods in Library, Documentation, and Information Science. Elsevier. 1990.
3. Glänzel, W. Bibliometrics as a research field: A course on theory and application of bibliometric indicators.2003.
4. Hamdaqa, M.; A Hamou-Lhadj. Citation Analysis: An Approach for Facilitating the Understanding and the Analysis of Regulatory Compliance Documents. Las Vegas, NV: IEEE. pp. 278–283.2009 .
5. Noyons, E. C. M. Bibliometric mapping as a science policy and research management tool. Leiden: DSWO Pre., University of Leiden.1999.
6. Wilson, Concepción S. "Informetrics". Annual Review of Information Science and Technology (Medford, NJ: Information Today) 34,1999.

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	gain familiarity with metric studies	K2
CO-2	gain understanding of the concept, theories, laws and parameters of Bibliometrics, Informetrics and Scientometrics, Webometrics and Altmetrics.	K2
CO-3	understandcitation analysis and operation research.	K4
CO-4	acquire knowledge application of Bibliometrics to study the literature in different subjects.	K2
CO-5	understandemerging trends in informatics and Scientrometrics.	K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	M	S	S
CO2	S	S	S	S	S	M	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	M
CO4	S	S	S	S	S	S	S	S	M	M
CO5	S	S	M	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LSP33**	**APPLICATION OF ICT IN LIBRARY (AUTOMATION, REPOSITORIES, DIGITAL LIBRARY & CMS)**	**L**	**T**	**P**	**C**
CORE XVI			**-**	**-**	**6**	**4**

Objectives

1. To study the collection of infrastructure and access in libraries using ICT application.
2. To make familiar with the various types of ICT practices applied in library services.
3. To understand how to organize a digital resource.
4. To justify the selection of hardware and software infrastructure.

Unit:I- KOHA

Installation - Administration - Acquisition – Cataloguing -Patrons – Circulation – Serial ControlsReport Generation.

Unit:II- SOUL
Installation - Administration - Acquisition – Cataloguing -Patrons – Circulation – Serial Controls Report Generation.

Unit:III–Dspace, Greenstone, Drupal
Installation of DSpace - Building digital collection Creating Metadata. Searching, Indexing. Modifying user interface.

Unit:IV- Greenstone
Installation of Greenstone.Building digital collection Creating Metadata. Searching, Indexing. Modifying user interface.

Unit:V- Drupal
Installation of Drupal -Building digital collection Creating Metadata. Searching, Indexing. Modifying user interface.

Text Books

1. Krishna kumar and Sashu Patel, Libraries and Librarianship in India, New Delhi: VIVA Books, 2001
2. Usha Devi, S.P. University and College Libraries, New Delhi: EssEss Publication, 1999
3. Mahapatra, P.K. Collection Management in Libraries and Budgetary Control, Jaipur: BookMan Associates, 1998.
4. Mishra, P.N. Data Storage and Information System in Libraries, New Delhi: Alfa Publications, 2010.
5. Kausik Bose Information Networks in India: Problems and Prospects / New Delhi: EssEss Publications, 1994.
6. Sampath Kumar, G.K. Digital Library Creation. New Delhi: Adhyayan Publishers & Distributors, 2011.

Reference Books

1. Marrays Martin, Collection Development and Finance, Chicago: ALA, 1995.
2. G.G. Chowdhury. Introduction to Digital Libraries. London: Facet Publishing, 2003.
3. MacDonald, Lindsay ed. Digital Heritage: Applying digital imaging to cultural heritage. 1st ed., Amsterdam: Elsevier, 2006.
4. Amit Gupta and SavitraSirohi ,Koha Library Management System, Packt Publishing, 2010.
5. Clayton, Marlene, Managing library automation. 2nd ed. London: 2018
6. Mishra, Vinod Kumar, Basics of library automation, Koha library management software and data migration: Challenges with case studies. New Delhi: EssEss Publications. 2016

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. Breeding, M. Library technology guides: key resources in the field of library

automation . http://www.library technology.org

2. Hodgson, Cynthia. The RFP writer's guide to standards for library systems.National Information Standards Organisation: Bethesda, Maryland, 2002. <http://www..niso.org>

The students will be able to

COURSE OUTCOME	CO STATEMENT	KNOWLEDGE LEVEL
CO1	Have thorough knowledge about Library Automation Softwares.	K1,K2,K3
CO2	Know and use Digital Library Software's: Greenstone and Dspace.	K2&K5
CO3	Know and apply Web Technologies.	K 2&K4
CO4	evaluate, and create Content Management: JOOMLA and DRUPAL.	K3&K4&K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	M	S	M	S	S	S
CO2	M	S	M	M	M	M	M	S	S	S
CO3	M	S	S	M	S	S	M	S	M	S
CO4	M	M	S	S	S	M	S	S	M	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

SEMESTER IV

COURSE CODE	P21LSE411	CHOICE -I	L	T	P	C
ELECTIVE -I		OPEN EDUCATION RESOURCES	4	-	-	4

Course Objectives: To enable the learners to

CO No.	Course Objectives
CO-1	understand the meaning of Open Educational resource &its types
CO-2	get familiarity with***E-Journals***
CO-3	understand the different Courseware
CO-4	to introduce Institutional Repository
CO-5	to study the development of OER in India.

Unit –IIntroduction to Open Educational Resources
Concept of Open Educational resource, Types of OER, difference between Proprietary and Open source, Contrast between Open and Free resources.

Unit-II Types of OER-E-journals

E-Journals: DOAJ, OAJSE, Indian Academy of science, High wire, NISCAIR Online PeriodicalsRepositoryE-Books: DOAB, Audible Books, Digital Library of India, OER Common, Project Gutenberg, Utah Open Textbook, E-Pustakalaya

Unit – IIITypes of Courseware
Courseware: sakshat Portal, MIT Course, NPTEL, SWAYAM, E-gyankosh, CEDT, SciGate, Khan Academy, MERLOT, NIOs, eGyanKosh

Unit- IV Institutional Repository
Institutional Repository: Open DOAR, OAJSE, National Repository of Open Educational Resources (NROER)

Unit-V Development of Open Educational Resources in India
Development of Open Educational Resources in India, challenge for education systems and has serious implications involving cost, access, equity, pedagogy and quality

Text Books

1.Jemni**,** Mohamed, Kinshuk**,** Khribi**,** Mohamed Koutheair (Eds.), Open Education: from OERs to MOOCs, Springer, 2013

2.PatrickBlessinger and TJ Bliss, Open Education: International Perspectives in Higher Education, Open Book Publishers, 2016

Reference

1) Cape Town Open Education Declaration. Cape Town Open Education Declaration: Unlocking the promise of open educational resources. Cape Town: Open Society Institute. 2007.
2) Centre for Economic Development (CED) , Harnessing openness to improve research, teaching and learning in higher education. Washington, 2009.
3) Dhanarajan, G. &Abeywardena, I. S. . Higher Education and Open Educational Resources in Asia: An Overview. In G. Dhanarajan& D. Porter (Eds.), Open Education Resources: An Asian Perspective . Vancouver: COL-OER Asia, 2013
4) MHRD , All India Survey on Higher Education. New Delhi: Government of India, 2013.
5) Chowdhury, G.G. and Chowdhury, Sudatta.. Searching CD-ROM and online Informationsources. London: Library Association,2000.
6. Mukhopadhyay, P. Resource description. In UNESCO course on Open Access (Module 4: Interoperability and Retrieval in OA – Unit 1). New Delhi: CEMCA/UNESCO,2014.

Web Links

1. https://www.oercommons.org/
2. https://doaj.org/
3. http://www.oajse.com/
4. http://www.ias.ac.in/
5. http://nopr.niscair.res.in/
6. http://www.doabooks.org/
7. http://www.olenepal.org/e-pustakalaya/
8. http://www.sakshat.ac.in/
9. http://nptel.ac.in/
10. https://www.merlot.org/merlot/index.htm

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMEs	COGNITIVE LEVEL
CO-1	understand Open Educational resource &its types	K1, K2
CO-2	Get Familiarity with ***E-Journals***.	K2
CO-3	understand the different Courseware	K2,K4
CO-4	introduce Institutional Repository.	K4,K5
CO-5	study the development of OER in India.	Ks,K5

Note: K1- Remembering; K2 – Understanding; K3 -Applying; K4 – Analyzing; K5 – Creating & Evaluating.
For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	M	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low– 1

COURSE CODE	P21LSE412	CHOICE -II	L	T	P	C
ELECTIVE -I		OPEN ACCESS INITIATIVES	4	-	-	4

Course Objectives: To make the learners be familiar with Open Access initiatives and to

CO No.	Course Objectives
CO-1	understand the concept of scholarly Communications
CO-2	understand, analyze, and apply Open Access policy and legislations
CO-3	understand, analyze, and apply Open source software
CO-4	understand, analyze, and apply OA interoperability standards
CO-5	understand, analyze, and apply OA Content management standards

UNITI I:Basic Concepts

Electronic Information Resources: Meaning and Definition, Growth and Development Scholarly communication and Open knowledge movement (history and landmarks); Open Access (OA) resources – nature, features, need and advantages (including citation advantages through article-level metrics);

UNIT II:Types of Open Access

E- Journals, e- Books, e-theses, e-newspapers, Blogs, Wikis. Free online dictionaries. Non free online dictionaries, Free thesauri, Encyclopaedia. Virtual Libraries, subject Gateways and portals

UNIT III: Open Access Resources and Pathfinders

Open Access (OA) resources – nature, features, need and advantages (including citation advantages through article-level metrics); OA Pathfinders – DMOZ, DOAB, OATD; Gold path of OA – DOAJ and Green path of OA – OpenDOAR, ROAR; Open Data; OA gateways – SSRN, PloS, OA federation – BASE, CORE; OA educational resources and OA citation services.

Unit IV: **Open Library System and its crisis**

Open library system (Os library) – open contents, open source software and open standards; A declarations – global and national; OA initiatives – global and national levels.

UNIT V: Open source Initiatives

SWAYAM : Meaning, Objectives, Concepts, MOOCs – Open Archive Initiative (OAI) – Open Source Softwares: Definition, types of Open source software, functions, advantages, disadvantages.

Text Books:

1. Narayana, G. J : Library and Information management, Prentice-Hall, 1991

Reference Books

1. Andersen, D.L, Digital scholarship in the tenure, promotion, and review process. Armonk, N.Y. : M.E. sharpe,2004.
2. Donohue, J. C. Understanding scientific literatures: bibliometricapproach, Cambridge, MIT Press,1974.
3. Gabriel, Michael. A guide to the literature of electronic publishing: CDROM, desktop publishing, and electronic mail, books and journals, Conn. : Jai Press,1989.
4. http://www.Library.cornell.edu/scholarlycomm/openaccessday.html
5. Machlup, F. and others Eds. Information through the printed word: The dissemination of scholarly, scientific, and intellectual knowledge. 1978-1980. New York: Praeger Publishers,1980

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	outline the scholarly communication and Open Knowledge movement.	K2
CO-2	apply and evaluate the OA policy levels of institutional, publishers, and funders.	K4
CO-3	compare the Open source softwares.	K5
CO-4	analyse the OA interoperability standards and evaluate the trends and future of OA.	K2
CO-5	outline the Content Management Software.	K3
CO-6	identify and demonstrate the library activities by using open source software skills leading to employability skills and entrepreneurship skills.	K5

Note: K1- Remembering; K2 – Understanding; K3 -Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	M	S	S	M	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	S	M	M	S	S	S	S

CO5	M	S	M	S	S	S	S	M	S	S
CO6	S	S	S	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LSE413**	**CHOICE -III**	**L**	**T**	**P**	**C**
ELECTIVE -I		**MARKETING OF INFORMATION AND SERVICES**	**4**	**-**	**-**	**4**

Course Objectives: To enable the learner to

CO No.	Course Objectives
CO-1	understand the concept of Information products.
CO-2	understand the concept, need , scope of Marketing
CO-3	understand the concept of marketing research and its functions
CO-4	understand, analyse, the procedures of marketing mix
CO-5	analyse the segmentation of Marketing

Unit – I - Information as a Commodity and Resource:

Information as a Commodity and Resource: Economics of Information–Marketing Concepts, Need, Scope– Marketing Strategies–Marketing in Library And Information Science .

Unit-II - Marketing Research

Marketing Research; Definition, Functions, Types and Scope – Application – Techniques – Marketing Information System – Components – Functions. BCG Matrix Model–Product Market Mix–Product Life–Cycle - Pricing Information–Competition Analysis

Unit –III Marketing Mix:

Introduction, history, Kotler'sFour 'C's–consumer, cost, convenience and communication, McCarthy's Four 'P's-product, price, place, promotion. Public relations, free publicity, advertising. The basic elements of marketing-Target market analysis, target audience, differentiation, problem solving customer service. Competition Analysis – Pricing Methods.

Unit –IV - Market Segmentation and Targeting

Market Segmentation and Targeting–strategic Market segmentation, strategic targeting,

Segmentation, Targeting and Positioning (STP),types of market segmentation, Geographic and Demographic Segmentation – Behavioral Segmentation –User Behaviour and Adoption–Marketing Advertisement

Unit – V – Information and Publishing Industries

Information and Publishing Industries–Nature of the publishing industry, work environment, employment, occupation in the industry, writing and editing, production, marketing – National and International –Online Marketing ,Marketing of Information Products and Services.

Text Books

1) Irving J. Rein, Philip Kotler, and Martin Stoller, High Visibility, Chicago: NTC Publishers, 1998
2) Philip Kotler, "Dream Vacations: The Booming Market for Designed Experiences", New York: Free Press, 1999.
3) Pillai RSN, Modern Marketing, New Delhi:S.Chand& Co., 2002.
4) Barclay Donald A, Teaching and Marketing Electronic Information Programs, Chennai: NFSBO,2011.
5) Fisher Karen, Theories of Information Behavior, New Delhi:EssEss, 2008.

References Books

1) Fisher Patricia.H, Blue print for your Library Marketing Plan,New Delhi: Ess Ess,2009.
2) Mathews Brian, Marketing Today's Academic Library,New Delhi:EssEss, 2009
3) Theodore Levitt, "Marketing Myopia", "Harvard Business Review", July – August 1960,
4) Helinsky (Z). A short-cut to marketing the library. Oxford:Chandos Publishing, 2008.
5) Irving, Ann. Marketing the information profession to the information society,California: Library Association,1992
6) https://digitalcommons.unl.edu
7) www.emeraldinsight.com/doi/pdf/10.1108/01435120410562844
8) https://www.slideshare.net

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	explain the needs of Information products.	K2
CO-2	outline the concept, need and scope of marketing.	K2
CO-3	summarize the marketing research and its functions.	K4
CO-4	explain the procedures of marketing mix.	K2
CO-5	evaluate the different segments of Marketing.	K5
CO-6	understand marketing and evaluate the extension activities of the libraries leading employability skills and entrepreneurship skills.	K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	S	S	S	S	S	M	S	S
CO2	S	S	S	S	S	M	S	S	S	S
CO3	S	S	S	S	S	S	S	M	S	M
CO4	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	M	S	S
CO6	S	S	S	S	S	S	S	S	M	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LSE421**	**CHOICE -I**	**L**	**T**	**P**	**C**
ELECTIVE –II		**ACADEMIC LIBRARY SYSTEM**	**4**	**-**	**-**	**4**

Course Objectives: To enable the learner to

CO No.	Course Objectives
CO-1	study the role and responsibility of academic libraries.
CO-2	give a clear picture on Resource sharing.
CO-3	study the information literacy program of academic libraries.
CO-4	get aware of types of libraries and their collection development process.

UNIT – I: Academic Libraries and their Development

Objectives and Functions History and Development of Libraries with special Reference to India Role of Libraries in Formal and Non-Formal Education system UGC and its Role in the Development of College and University Libraries

UNIT – II: Collection Development and Management

Periodicals, Conference Literature, Grey Literature and Government Publications Non-Book Materials Electronic Resources and Online Databases

UNIT – III: Library Organization

Library Administration, Library Organizational structure, communication- staff communication, clientele communication, Librarystaff Manual, Library surveys, library statistics and Library standards, etc.

UNIT – IV: Abstracting and Indexing Services

Library Bulletin, Newspaper ClippingservicesComputerized services Resource sharing and Networking: INFLIBNET, UGC-INFONET Digital Library Consortium, etc. Information Literacy Programmes

UNIT – V: Planning and management

Resource sharing-manpower and staff formula- university and college library authorities, Information literacy programme in academic library-public relation in academic libraries.

Text Books

1. Mayer R M. strategic Management for Academic Libraries: A Handbook. The University of Michigan:Greenwood Press, 1993.
2. Lyle G R. College Library Publicity. New Delhi: Reliance, 1986.
3. Ranganathans. S. R. school and College Libraries. Madras: MLA, 1942.
4. UGC (India). Library Committee Report (1957) University and College Libraries. New Delhi: UGC, 1967.
5. Viswanathan C G. University Libraries of India (1857-1970). New Delhi: Author,1972.
6. Iyengar, S. Academic Libraries and Budgetary Control. Jaipur: Bookman Associates, 1998.
7. Ajay, K. Srivastav and Sanjivsaraf. Collection Development in Academic Libraries, New Delhi:Shree Publishers& Distributors, 2006.

Recommended Books

1) Baker (David), Ed. Resource management in academic libraries. London: Library Associations, 1997.
2) Brophy (Peter). The academic library. London. Library Association, 2000
3) Budd (J M). The academic library: the context, its purpose and its operation. London: Libraries Unlimited,1988
4) Chapman (Liz). Managing acquisitions in library and information servicesLondon: Library Association, 2001.
5) Dowler (L) Ed. Gateways to knowledge: the role of academic libraries in teaching, learning and research. LondonThe MIT Press, 1998.

Course Outcomes: The learner will be able to gain knowledge about

CO No.	COURSE OUTCOMEs	Cognitive level
CO-1	therole and responsibility of Academic Libraries.	K2 &K3
CO-2	academic Libraries-types.	K1&K2
CO-3	library Authority and Library Committee.	K3
CO-4	planning and Management.	K3 &K4
CO-5	Information Literacy Programme in Academic Libraries.	K2&K5

Note: K1- Remembering; K2 – Understanding; K3 -Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	M	S	S	S	S	S	S
CO2	S	S	S	S	M	S	M	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S

CO4	S	S	S	S	S	M	S	S	S	S
CO5	S	S	S	S	S	S	S	S	M	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LSE422**	**CHOICE -II**	**L**	**T**	**P**	**C**
ELECTIVE -II		**PUBLIC LIBRARY SYSTEM**	**4**	**-**	**-**	**4**

Course Objectives: To enable the learners to

CO No.	Course Objectives
CO-1	understand the Public Libraries and their Development Objectives and Functions
CO-2	be familiar with Collection Development and Management
CO-3	be familiar with Library Organization and Administration
CO-4	enable the students to know about the Information services
CO-5	understand the importance of Financial and Human Resource Management

UNIT – I: Public Libraries and their Development

Public Libraries and their Development Objectives and Functions -History and Development of Libraries with special Reference to India Role of Public Libraries in society Agencies and their Role in Promotion and Development of Public Libraries in India

UNIT – II: Collection Development and Management

Collection Development and Management -Periodicals, Conference Literature, Grey Literature and Government Publications Non-Book Materials Electronic sources and Online Databases

UNIT – III: Library Organization and Administration

Library Organization and Administration–Organizational structure staff Manual, Library surveys, statistics and standards, leadership and motivation, governing and funding bodies, planning and policy development, management of library resource, staff management,

marketing and promoting.

UNIT – IV: Abstracting and Indexing services

Abstracting and Indexing services -Library Bulletin, Newspaper Clipping services Computerized services Resource sharing and Networking, public libraries current awareness service, public libraries Selective Dissemination of Information, e-mail service.

UNIT – V: Financial and Human Resource Management

Financial and Human Resource Management -Determination of Finance, sources of Finance Types of Budget Nature, size, selection, Recruitment, Qualification and Training Responsibilities and Duties Competency Development.

Text books

1) Barua (B P). National policy on library and information systems and services for India: perspectives and projections. Bombay: Popular, 1992.
2) Batt (Chris). Information technology in public libraries. London:London Library Association Publishing, 1998
3) Bhatt (R K). Unesco: development of libraries and documentation centres in developing countries. New Delhi: K K Publications, 2004.
4) Higgins (s E). Youth services and public libraries. Oxford:Chandos Publishing, 2007

Reference Books

1. IFLA. IFLA guidelines for public libraries (revised). The Hague: IFLA. 2000 INDIA. Advising committee for libraries. Ed. 2 Delhi: Manager of Publications, 1958
2. Jaganayak (ss). Role of libraries in socio-economic, cultural, and educational development. New Delhi: Classical Publication, 1997.
3. Patel (Jashu) and krishankumar. Libraries and librarianship in India. Connecticut-Westport: Greenwood Press, 2001
4. Thomas (V K). Public libraries in India: development and finance. New Delhi:Vikas Publication, 1997
5. Woodrum (Pat), Ed. Managing public libraries in 21st century. New York: The Harward Press,1989.

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMEs	Cognitive level
CO-1	understand the Public Libraries and their Development Objectives and Functions	K1, K2
CO-2	get familiarity with Collection Development and Management	K1,K3
CO-3	be familiar with Library Organization and Administration	K2,K3
CO-4	know about the Information services	K3
CO-5	understand the importance of Financial and Human Resource Management	K2,K3

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	S	S	S	S	S	S	S	M
CO2	M	S	S	S	S	S	S	S	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	M	S	S	M	S
CO5	S	S	S	S	S	S	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LSE423**	**CHOICE -III**	**L**	**T**	**P**	**C**
ELECTIVE -II		**DATA ANALYTICS USING R**	**4**	**-**	**-**	**4**

Course Objectives: To make familiar with Data Analytics Using R and to enable the learners to

CO No.	Course Objectives
CO-1	remember the data analysis and data analytics.
CO-2	understand the installing R and R studio.
CO-3	apply the data Summarization & Visualization.
CO-4	analyze the reporting tools.
CO-5	create and evaluate the case studies.

Unit I Introduction to Data Analytics

Introduction Data Analytics – Data Analysis Vs Data Analytics – Data Analytics – Types - Data Analytics – Framework – Data Analytics – Tool - R language - Understanding R features - Installing R and R Studio – Packages and Library – Importing and Exporting Files: CSV File – JSON File – txt File –Excel File – Xml File - Command Line Vs. Scripts. - Data Pre-Processing – Missing Value – Omitting Null Values - Data Transformation – Data Selection – Data Integration

Unit: II - Features and Packages

Understanding R features - Installing R and R Studio – Packages and Library – Importing and Exporting Files: CSV File – JSON File – txt File –Excel File – Xml File - Command Line

Vs. Scripts Data Manipulation: Slicing - Subscripts and Indices – Data Subset – Dplyr Package: Select Function - Filter Function - Mutate Function - Arrange Function.

Unit:III - Summarization and Visualization

Data Summarization & Visualization - Mean – Median – Mode - Variability Measures - Variance – Range - IQR – Standard Deviation – Sum of Squares –Identifying Outliers using IQR. Data Visualization – Introduction – Datasets – Exploratory Data Analytics – Univariate Analysis – Histogram - Bivariate Analysis - Box Plot – Multivariate Analysis - Scatter Plot - MASS Package - Categorical Variable –Bar Chart – Mosaic Plot.

Unit:IV Reporting Tools

Reporting Tool – Analyzing Gathering Information – Story Telling – R Markdown - R Markdown Framework – R markdown package – Knit for Embedded Code: KNITR package - Convert File:HTML, PDF, MS Word - Markdown Formatted Text – Shiny App - shiny package: Built Shiny app – Control Widgets – Customize Reactions – Reactive Expressions - Customize Appearance - Deploy Shiny app.

Unit:V - Case Studies

Data Analytics Case Studies – Marketing – Logistic Management – Insurance – Behavioural Analytics – Data Analytics on Diamond Dataset

Text books:

1.Bhuvaneswari,V, "Data Analytics with R Step by Step", SCITECH Publisher, 2016
2.Emmanuel Paradis, "R for Beginners",France: Montpellier, 2005.
3. VigneshPrajapati, "Big Data Analytics with R and Hadoop", Packt Publishing, 2013.

Reference Books

1. Roger D. Peng, "R Programming for Data Science", Lean Publishing, 2014.
2. Sholom Weiss, et.al, "The Text Mining Handbook: Advanced Approaches in Analyzing Unstructured Data", Springer, Paperback 2010.

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

1. www.udemy.com
2. https://www.mooc-list.com/course/analyzing-big-data-microsoft-r-edx

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	remember the data analysis and data analytics	K1 &K2
CO-2	understand the installing R and R studio	K2
CO-3	apply the data Summarization & Visualization	K3
CO-4	analyze the reporting tools	K4
CO-5	create and evaluate the case studies	K5

Note: K1- Remembering; K2 – Understanding; K3 -Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	M	S	S	M	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	S	M	M	S	S	S	S
CO5	M	S	M	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LSR41**	**PROJECT**	**L**	**T**	**P**	**C**
			-	**-**	**22**	**8**

Projects

Project (Dissertation =60 Marks, and Viva- Voce = 40 Marks)

Internal Marks:

Theory : 25/Course

Practice: 40 / Course

External Marks:

Theory : 75/Course

Practice: 60 / Course

NON MAJOR ELECTIVE (NME)

COURSE CODE	P21LSN211	CHOICE -I	L	T	P	C
NME I		DIGITAL PORTFOLIO MANAGEMENT	4	-	-	4

Course Objectives: To practice the students to

CO No.	Course Objectives
CO-1	understandand apply the concept of Website creation.
CO-2	understand and apply the concept of Blog creation
CO-3	understand and apply the concepts of Wordpress and create a website.
CO-4	understand analyse and apply the procedure for indexing
CO-5	understand and apply copyright for self-maintained Blog or website

Unit I: **Websites and Web hosting**

Introduction, web hosting: -types of website, designing websites-web language-HTML, CSS, script language, File Transfer Protocol, Database Management. Codify the design, creating a website with content Management System

Unit II: Blog Characteristics

Blog creation: Blogs Introduction, creation and maintenance of Blogs,customise blogs, custom theme, plan a web designer, create a customer group,featured website Content Management System, blogging platform.

Unit III: Blog creation and Content Management System

Introduction, types of blog, selection of theme, file, folder,create style, css and index.php in custom theme, folder activation of theme, output of the Post title and Post text, leveraging wordpress loop, How to add link to each Post. Add Header footer. Change site information in the wordpressdashboard.add a functions.php

Unit IV: Digital Index creation

Introduction and create an index of a topic or a gateway, classification of index,advantages and disadvantages of index, maintenance and types of searching. Digital Acceleration Index (DAI), Digital value creation, global digital readiness Index, Digital transformation Index

Unit V: Digital copyright

Introduction, copyright Act 1976, digital technology copyright,private copy right, copyrights for website and blogs. The digital millennium copyright act-fair use-General solicitude for user rights.Online copyright infringement liability limitation.Computer maintenance or repair copyright exemption, protection of certain original design.

Text Books

1. Ian Clazie, Creating Your Digital Portfolio, HOW Books,2010
2. Cynthia L Baron, Designing a Digital Portfolio, Second Edition, New Riders, 2009

References Books

1) Andy Williams, Wordpress for Beginners,2018
2) Manual for Creating Free Weebly Website
3) Manual for Creating Blogspot/ Wordpress
4) www.w3schools.com

Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	design a Website	K2
CO-2	design Model and develop Blogs	K2,K3
CO-3	infer the concepts of Wordpress and Develop a website	K2,K3,K5
CO-4	appraise the various steps for indexing	K3
CO-5	make use of copyright for self-maintained Blog or website	K3,K5
CO-6	create websites, Blogs by using open source software skills leading to employability skills and entrepreneurship skills.	K5

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	M	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	M
CO3	S	S	S	S	M	S	S	S	S	S
CO4	S	S	S	S	S	S	M	S	S	S
CO5	S	S	S	S	S	S	M	S	S	S
CO-6	M	S	S	S	M	S	S	S	M	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LSN212**	**CHOICE -II**	**L**	**T**	**P**	**C**
NME I		**INTELLECTUAL PROPERTY RIGHTS**	**4**	**-**	**-**	**4**

Course Objectives: The learner will be able to

CO No.	Course Objectives
CO-1	understand the concept of IPR.
CO-2	understand and analyse the steps involved in Registration.
CO-3	understand the agreement and acts of IPRs.
CO-4	analyse the Digital products and law.
CO-5	analyse and apply Enforcement of IPRs.

Unit-1 – Introduction to IPR

Intellectual Property Rights IPR-– Definition, meaning, concept, Origin of Intellectual property Rights, need&purpose.Forms of Intellectual Property Rights in the Digital

Era..Rights to Information Act.purpose and Procedure. Permitted and exemptions. Four types of intellectual property protection

Unit-II – Copyright Law and Act

Copyright Law – Definition of copy right act, types of works protected, Ownership of copyright under copyright act 1957, Exceptions to copyright infringement, Remedies. .Copyright Act-– Need – subject matter, transfer of copy right, Registration and deposit, Impacts of termination Rights -Violations ofthe Copyright Law

Unit-III - Cybercrime

Cyber rime-Definition and classification of cyber crime, combating computer crime: investigation, prevention, Legislation, Penalties, awareness, Intelligence and Diffusion.how to protect yourselves from cybercrime- Agencies.

Unit-IV - Cyber law

Cyber law-introduction and meaning, categories of cyber law, need for cyber law, importance of cyber law, advantages of cyber law.Jurisdiction and sovereignty, net neutrality, free speech in cyber space, Governance: law, architecture, norms, markets, Internet regulations in other countries, cyber-crime.

Unit-V - Information Technology Act

Information Technology Act 2000, cyber-crime against persons, against persons' property, against Government, against society at a large, case study attacks on cyberspace, preventive measures for cyber-crimes, the common types of computer crimes,CoE taxonomy of cyber-crime offences, G8 taxonomy of threats, computer related crimes: Analysis of legal policy, criminalization, jurisdiction and international co-operation, law enforcement and cybercrime.

Text Book

1) David Vaver, Intellectual Property Law: Copyright Patents Trade-Marks, 2d ed (Toronto: Irwin Law Inc., 2011)
2) Mahajan, V.D.Jurisprudence and Legal Theory. Easter Books, New Delhi, 2001
3) Narayan,P.S. Intellectual Property Law in India.Gogia Law Agency, Hyderabad,2001
4) Sharma,B.Copy right Law in respect of Books. Federation of Indian publishers,New Delhi, 2006

Reference books

1) Natarajan P, Intellectual Property Right, third ed. Esteem law House, 2017
2) KhushdeepDharni and NeerajPandey, Intellectual Property Right,New Delhi:PHI Learning, 2014.
3) Satarkar.S.P Intellectual Property Rights and Copyright, New,Delhi:EssEss Publications, 2003.

4) Vinod. V. Sople, Managing intellectual property: the strategic imperative, prentice hall India, 2001
5) Rao, MB, Guru, Manjula, Understanding TR IPS: managing knowledge in developing countries, New Delhi: Response books, 2002

E books

1) www.copyright.gov.in
2) www.ipindia.nic.in
3) Open access by Peter Suber by the MIT press essential knowledge, London

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	explain the concept of IPR	K2
CO-2	apply the steps in the registration process.	K2
CO-3	evaluate the rules and acts of IPR	K5
CO-4	importance of Digital products and law	K3
CO-5	examine the enforcements of IPR	K4
CO-6	analyze the IPR acts and products help in development of employability skills and entrepreneurship skills.	K3

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	M	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	M	S	S
CO6	S	S	M	S	S	S	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

VALUE ADDED PROGRAM

COURSE CODE	P21LSV11	DIGITAL INFORMATION MANAGEMENT	L	T	P	C
SEMESTER -I				-	-	2

Course Objectives: To train the students to

CO No.	Course Objectives
CO-1	understand the concept of Digital Information Management in the digital world.
CO-2	learn content creation, file and file formats.
CO-3	learn about metadata, Data Exchange formats.
CO-4	analyze open source licenses.

Unit-1 – Introduction of Digitization
Introduction and Basic Concepts of Library Digitization –Nature and scope of Digitization,Merits of Digitization,History and development of Open Source Software.

Unit-II – Content Creation
Application of open source software in libraries, Creating electronic documents, files and file formats, Digitization-Scanning, OCR and Conversion to PDF

Unit-III - Standards
Basic concepts of Dublin Core, MARC standards, Resource Description and Access (RDA).

Unit-IV - Open Source Licenses
GNU General Public License (GPL) Open Archives Initiative. OAI-PMH

Unit-V - Hands-on Experience
Academic Journal Software: Open Journal System Software (OJS)

Text Books

1. Chambers, S. ,Catalogue 2.0: The future of the library catalogue.London: Facet Publishing.2013
2. Rajaraman, V. Introduction to information technology. Delhi:PHI Learning Pvt. 2018

Reference books

1. Tiwari, P. Digital library. New Delhi: A P H Publishing Corporation, 2008
2. Ashton-Warner, S. , Greenstone. New York: Simon and Schuster 1966
3. Martin, S. K. , Library networks. White Plains, NY 10604 EMERSON : Knowledge Industry Publ. 1976

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	remember the concept of a digital world	K2
CO-2	learn content creation, file and file formats.	K2
CO-3	learn about metadata,Data Exchange formats	K5
CO-4	analyze open source licenses	K3

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	S
CO4	S	S	S	M	S	S	S	S	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

COURSE CODE	**P21LSV42**	**E-PUBLICATION**	**L**	**T**	**P**	**C**
SEMESTER -IV				**-**	**-**	**2**

Course Objectives: To enable the learners to

CO No.	Course Objectives
CO-1	know about document structure
CO-2	learn types and designing for print
CO-3	make Presentation of content on internet with its type
CO-4	learn technology for multimedia
CO-5	create designing on multimedia and publishing aspects

Unit I – Technology for Print

Technology for Print: Document structure, document preparation systems, DTP, DDLs, page description languages, text databases, standards;

Unit II - Design for Print

Design for Print: Type design, graphic design, composition products, separation

Unit III - Technology

Technology for presenting static and dynamic content on the Internet

Unit IV – Technology for Multimedia

Technology for Multimedia: Hypermedia etc., music and sound, interactive software, multimedia databases, intelligent systems, visualization, virtual reality, CAL, standards

Unit V Design for Multimedia and publishing

Design for Multimedia: Design methodologies, media evaluation, HCI considerations; Multimedia Publishing: Financial strategies, market sectors (educational, music, art, etc., versus academic, business, popular, etc., versus newspaper, magazine, journal, book, video, etc.), comics.

Text Books

1. Bommel, Patrick Van. Information Modeling for Internet Applications, 2002.
2. EyalAmiran, Elaine Orr, and John Unsworth. Refereed Electronic Journals and the Future of Scholarly Publishing. Advances in Library Automation and Networking,1991
3. JEP: the Journal of Electronic Publishing. Published by the University of MichiganPress.
4. Levine, Mark. The fine print of self - publishing: the contracts and services of48 major self publishing companies Analyzed, Ranked and exposed 2006.
5. Maran, Ruth; Whitehead, Paul. Internet and World Wide Web Simplified, 3rd Ed.Marangraphics Inc., and Internet and World Wide Web Simplified 1999.

References

1. Krishnan, R.K., Special Library System and Information Services, New Delhi :Anmol Publications Pvt. Ltd., , 2013.
2. Gurdev Singh, Information Sources, Services and Systems, New Delhi:PHI Learning Pvt. Ltd.,2013.
3. Sharma,B.Copy right Law in respect of Books. Federation of Indian publishers, New Delhi, 2006
4. Gorman, Digital Features in Information and Library Services, Chennai, Allied Publishers, 2002.

Course Outcomes: The learner will be able to

CO No.	COURSE OUTCOMES	COGNITIVE LEVEL
CO-1	gain knowledge about document structure	K2
CO-2	learn about types and designing for print	K2

CO-3	make Presentation of content on internet with its type	K5
CO-4	learn about technology for multimedia	K3
CO-5	create designing on multimedia and publishing aspects	K4

Note: K1- Remembering; K2 – Understanding; K3 – Applying; K4 – Analyzing; K5 – Creating & Evaluating.

For every Course Outcome Knowledge Level should be mentioned & Knowledge Level can be more than one (i.e. like K1&K2)

Outcome Mapping

CO/PO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	M	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	M	S	S
CO3	S	M	S	S	S	S	S	S	S	M
CO4	M	S	S	M	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	M	S	S

*S-Strong - 3; M-Medium - 2; L-Low - 1

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