GURU GHASIDAS VISHWAVIDYALAYA,
BILASPUR(C.G.)
(A Central University)
MASTER OF LIBRARY AND INFORMATION SCIENCES
ONE YEAR (TWO SEMESTERS) POST GRADUATE DEGREE PROGRAM
CBCS BASED PROGRAMME
Scheme of Examination w.e.f. Session: 2025-2026 Onwards

PROGRAM OUTCOMES

The programme learning outcomes relating to Master's degree in Library and Information Science include the following:

(a) To Provide the students basic knowledge of the of the applications of the information technology and quantitative techniques including statistical methods.

(b) Demonstrate in depth knowledge of the basic concepts, principles, theories and laws related with the broad field of Library and Information Science and its sub-fields such as Knowledge Society, Information Storage and Retrieval System, library management, Information Source, System and Programmes, Research Methods and Statistical Techniques, Information Analysis, Repackaging and Consolidation.

(c) Apply skills in carrying out professional activities such as (i) Technical writing (ii) housekeeping operations using library management software and Information and Communication Technologies;(iii) Repackaging and consolidation (iv) user studies. (V) Internet and database searching.

(e) To give the students an understanding of application of modern management ideas and techniques.

(f) Would develop his/her research aptitude and skills in the field of Library and Information Science.

(g) Develop capacity to apply core ethical principles in professional and everyday practice.

(h) Ability to seek job opportunities as library professionals capable of self-paced and self-directed learning aimed at personal and professional development for improving knowledge and skills and for re-skilling through continuing educational opportunities.

(i) To train and expose to research problems through project works / Dissertation / Group Seminar

(j) the learner will be able to use Library Automation and Open Source Softwares and design Library Web Page independently.

(k)find placement in Public, Academic, Corporate and Special Libraries in India and Abroad.

Courses	Title	Credits (L:T:P)	MARKS DISTRIBUTION		
			Continuous Evaluation	Semester End Examination	Total Marks
First Semester					
LIPATT1	**Core Courses (CC)** Knowledge Society	3:1:0	30	70	100
LIPATT2	Information Storage and Retrieval (Theory)	3:1:0	30	70	100
LIPATT3	Information Communication Technology for Libraries (Theory)	3:1:0	30	70	100
LIPALT4	Information Storage and Retrieval (Practice)	0:1:3	30	70	100
LIPALT5	Library Use and User Studies (Practice)	0:2:2	30	70	100
LIPATG1 LIPATG2 LIPATG3	**Generic Elective(GE)*/**** Webometrics, Informatics & Scientometrics Preservation and Conservation of Library Materials Media and Information Literacy	3:1:0	30	70	100
	TOTAL	24	180	420	600
Second Semester					
LIPBTT1	**Core Courses(CC)** Information Source, System and Programmes	3:1:0	30	70	100
LIPBTT2	Management of Libraries and Information Centers / institutions	3:1:0	30	70	100
LIPBTT3	Research Methods and Statistical Techniques	3:1:0	30	70	100
LIPBLT3	Information Communication Technology for Libraries (Practice)	0:1:3	30	70	100
LIPBLA2 LIPBLA4	**Ability Enhancement Compulsory Course (AECC)#** Information Analysis, Repackaging and Consolidation Natural Language Processing	0:1:1	30	70	100
LIPBLL2 LIPBLL3	**Skill Enhancement Course (SEC)*#** Technical Writing and Content Development Sources of Indian Knowledge System	0:1:1	30	70	100
LIPBPF1 LIPBPF2	**Discipline Specific Elective (DSE)**** Project Work/Dissertation (In Lieu of DSE) Knowledge Discover in Database and Data Mining	4	30	70	100
	TOTAL	24	210	490	700

Note:

**#Student may opt anyone MOOC Course (current/upcoming) available at SWAYAM and notified by the department.

 # Value Added Course

Note: *Practical and Viva-voce will be conducted by internal examiner*

LIPATT1
Knowledge Society
TM100 (Internal Assessment 30+Theory70)(Credit-04)

Objectives:

-This unit will introduce the notions of information and knowledge societies and examine in some detail their basic traits and characteristics.
- The principal differences between knowledge societies and pre-knowledge societies are explained and the major issues that need to be addressed in becoming a knowledge society are outlined.

Learning Outcomes :

After studying this paper, students shall be ablet o:

- An understanding of the differences among the notions of Data, Information and Knowledge**.**
- An understanding of different Acts and Laws related to information society
- The conceptual difference between information society and knowledge society .

Unit1: Data, Information and Knowledge

- Data, Information and Knowledge & Wisdom : concepts and differences
- Information generation
- Communication channels, modes barriers.

Unit2:Information Society

- Information Society and Knowledge Society :Genesis, characteristics and Implications
- Policies Programme Related to Information. National Information Policy of India
- Information Industries.
- Censorship, FairUse. Creative Commons.
- Right to Information Act; Intellectual Property Rights; Information Technology Act; Plagiarism

Unit3: Information Science

- Information Science: Definition, Scope, objectives
- Information Science as a Discipline & its relationship with othersubjects
- Theoretical Models Information Communication

Unit 4: Economics of information

- Information as an Economic Resource
- E-Commerce and E-Governance
- Marketing of Information.

Unit5: Information & Knowledge Management

- Information Management
- Knowledge Management
- Information Society Vs Knowledge Society
- Electronic Resource Management

Reading List :

1. Abell Angela and Nigel Oxbrow, Competing with Knowledge: The Information Professional in the Knowledge Management Age. London: Facet Publishing, 2001.
2. Blaise Cronin. ed. Information Management: from strategies to action London Aslib,1985.
3. Bikowrtx W. R.: Knowledge Management Delhi PHI. 2000
4. Chorafas D. N. Knowledge Revolution. 1968.
5. Crawford, Marshali Jean: Information Broking: a new career in information work, London: L. A. 1988
6. Dhiman A.K.: Knowledge Management for Librarians. New Delhi: EssEss, 2009
7. Galatin, Malcolm &Laiter, Robert D eds. Economics of Information London :Nijhoff ,1981
8. Gurnsey, John and White Martin. Information Consultancy London Clive Binglev 1989.
9. Koenig Michael E.D. and Shrikantaiah(Ed): Knowledge Management: lessons learned what works and what doesn't, New Delhi: EssEss, 2008
10. Koenig Michael E.D. and Shrikantaiah T.K.(Ed): Knowledge Management in Practice : connection & context, New Delhi: EssEss, 2008
11. Kumar (PSG) A Student's Manual of Library &Information Science Delhi : BR Publishing

12 Cawkell, A.E., Ed. (1987). Evolution of an Information society. London: ASLIB.
13. Cronin, B (1981). Marketing of Library and Information services. London: ASLIB.
14. Eileen, E. D.S. (2002). Marketing concepts for Libraries and Information services. 2ndEd. London: Facet Publishing.
15. Jain, A.K and others Ed. (1995). Marketing of Information products and services. Ahmedabad: IIM.
16. Kotler, P. (1975). Marketing for non-profit organization. Prentice-Hall

LIPATT2

Information Storage and Retrieval (Theory)

TM100(Internal Assessment30+Theory70)(Credit-04)

Objectives:

- To study various methods and techniques of information retrieval and search strategies
- To understand the perspectives and significance of Information retrieval in the present– context
- To develop skills in information processing, organization, and retrieval
- To familiarize students with information retrieval techniques
  To understand indexing concepts, theories, methods, and importance
- To familiarize students with current trends in information retrieval–

Learning Outcomes :

After studying this paper, students shall be ablet o:

- Understand the objectives, components, and functions of information processing and retrieval systems
- Gain the knowledge of information search, search techniques; search strategies; and other search formations
- Clear understand the concepts, theories, methods and importance indexing languages, thesauri, and different subject headings
- Understand the different kinds of indexing systems like Pre-Coordinate and Post coordinate, PRECIS, Chain Indexing, POPSI, KWIC, UNITERM Indexing, Citation indexing, etc.;

Unit 1: Information Storage and Retrieval Systems

- Concepts, Objectives, Functions and component of ISAR system
- ISAR System: Operation Design
- Evaluation of ISAR System
- Classical IR Models

Unit2: Subjects Indexing: Principle and practices

- Indexing: Concept, Theories and Methods, Historical Development
- Pre -coordinate Indexing system, Citation Indexing
- Post –coordinates Indexing System- Keyword, Uniterm etc.

Unit3: Vocabulary Control & Indexing Language

- Indexing Language: Type and Characteristics,
- Vocabulary Control : Tools, Need and Scope
- Thesaurus : Structure ,Function and Construction

Unit4: Searching Technique and Information Retrieval

- Man and Machine Retrieval System
- Search Strategies :Boolean Operations, Proximity Search, Heuristic Search,Navigational Searchetc., Federated Search and Multimedia Databases Search
- Data Mining, Data Harvesting,: OAI/PMH, Semantic Web

Unit5: Advanced IR Techniques

- Cross-language retrieval
- Image retrieval
- Multimedia retrieval
- Application of Artificial Intelligence (AI) and Machine Language (ML)

Reading List :

1   Alberico, R. &Micco M.(1990). Expert systems for reference and information retrieval. West Port : Meckler. Aslib Atchison, J. & Alan G. A. (1972). Thesaurus construction: a practical manual. London: Aslib.
2   Atchison, J. & Gilchrist, A. (1972). Thesaurus construction: a practical manual. London: Aslib.
3   Austin, D. (1984). PRECIS: A manual of concept analysis and subject Indexing. 2nded.
4   Chowdhruy, G. G. (2003). Introduction to modern Information retrieval. 2nd Ed. London: Facet Publishing.
5   Cleaveland, D. B. (2001). Introduction to indexing and abstracting. 3rd Ed. Englewood Colo. : Libraries Unlimited
6   Crawford, M. J. (1988). Information broking: a new career in information work. London: Facet publishing.
7   Ford, N. (1991). Expert systems and artificial intelligence: An information manager's guide. London: LA. Page 45 of 73
8   Ghosh, S. B., &Biswas, S.C. (1998). Subject indexing systems: Concepts, methods and techniques. Rev. ed. Calcutta: IASLIC.
9   Lancaster, F. W. (1968). Information retrieval systems, characteristics, testing and evaluation. London: Facet publishing.
10 Lancaster, F.W. (2003). Indexing and abstracting in theory and practice. London: Facet publishing.
11 Pandey , S.K. (2000). Library information retrieval. New Delhi: Anmol.
12 Seetharama, S. (1997). Information consolidation and repackaging. New Delhi: EssEss publications.
13 Van, R.C.J.(1970). Information retrieval, 2nd ed. London: Butterworths.
14 Vickery, B.C. (1970). Techniques of information retrieval. London: Butterworths.

Information Communication Technology for Libraries (Theory)
TM100 (Internal Assessment30+Theory70)(Credit-04)

Objectives:
- To introduce the students to the basics of IT and related issues
- To train students in using information technology tools and techniques in information access, service, management, and archival activities
- To be familiar with applications of computers and information Technology in libraries.

Learning Outcomes :

After studying this paper, students shall be able to:

- Knowledge of automation software's and its application in the library
- Knowledge about a basic features of internet and its various tools.
- Knowledge of designing of webpage and content management.
- Concepts of digital library.

Unit 1: Library Automation
- Planning and Implementation of Library Automation.
- House keeping Operation of Library.
- Evaluation of Library Automation Software

Unit2: Internet Basics Features and Tools

- Internet: Definition, application and Tools
- Internet Connectivity
- E-mail
- Internet Protocol:
- OSI Network Model and TCP/IPReference Model
- Network Based Information Services

Unit 3: Web Page Designing & Content Management

- Hypertext and Hyperlink, Hypermedia
- Basic Code of HTML5.
- Web Based Content Development,
- Content Development software: JOOMALA /Word Press etc

Unit4:WWW and Scholarly Communication

- Semantic Web, Invisible Web and Deep Web
- Meta search engine,
- online database,
- Information gateway
- Digital repositories

Unit5: Digital Libraries

- Genesis, Definition, Objectives, Scope of Digital Libraries
- Study of digital Library Software: Greenstone, D-Space
- File Format: Text, Audio, Video and Image
- Software and Hardware for Digital libraries:
  OCR, Image editing software,
- Input Capture Devices: Scanners, Digital Movie Cameras
- Digital Preservation: Definition, Issues and Strategies

Reading List :

1 Ahsan, N. (2002). Computer hardware guide. Delhi: Educational publishing house.
2 Allen, T., & Robert, N. (2002). Programming languages. New Delhi: Tata McGraw-Hill.
3 Balakrishnan, S. (2000). Networking and the future of libraries. New Delhi: EssEss publications.
4 Bansal, S. K. (2005). Information technology and globalisation. New Delhi: A.P.H. publishing.
5 Basandra , S. K. (2002). Computers today. New Delhi: Golgotia.
6 Clements, A. (2004). The principles of computer hardware. New York: Oxford publications.
7 Dhiman, A. K. (2003). Basics of information technology for librarians and information scientists. New Delhi: EssEss publications.
8 Gill, N. S. (2016). Handbook of computer fundamentals. New Delhi: Khanna book publishing Co.
9 Gupta, V. (2005). Rapidex computer course. New Delhi: Pustakmahal.
10 Hunt, R., & Shelley, J. (2002). Computers and common sense. New Delhi: Prentice-Hall.
11 James, K. L. (2013). Computer hardware. Delhi: PHI Learning Pvt. Ltd.
12 Jeanne, F. M. (2006). A librarian's guide to the internet: A guide to searching and evaluating information. Oxford: Chandos publishing.

LIPALT4

Information Storage and Retrieval (practice)

TM100(Internal Assessment30+Practice70)(credit04)

Objectives:
- Practical implication of Information Storage and Retrieval systems with special reference to UDC , Cataloguing, Indexing and so on.

Learning Outcomes :
After studying this paper, students shall be able to:

- Retrieval practice enhance the long- term retention of information
- Understand the practical aspects of information storage and retrieval tool/ systems
- Understand the classification with special reference to UDC and different kinds of indexing systems like Pre-Coordinate and Post coordinate, PRECIS, Chain Indexing, POPSI, KWIC, UNITERM Indexing, Citation indexing, etc.;

Unit 1: Preparation of Class Number for Micro-Document using UDC.
Unit2:Preparation of cataloguing entries for Complex Continuing Resources And Non-book Materials.
Unit-3: Preparation of Indexes and Abstracts

Reading List :

1   Alberico, R. and Micco M. (1990). Expert systems for reference and information retrieval. West Port:Meckler.
2   Atchison, J. and Gilchrist, A. (1972). Thesaurus construction: a practical manual. London: ASLIB.
3   Charles, T., Boyce, Bert R. and Kraft, Donald H. 2000. Text Information retrival Systems. (Library and Information Science). 2nd ed. California: Academic Press
4   Chowdhruy, G.G. (2003). Introduction to modern Information retrieval. 2nd ed. London: Facet Publishing.
5   Cleaveland, D. B. (2001). Introduction to Indexing and Abstracting. 3rd ed. Englewood, Colo: Libraries Unlimited.

6   Lancaster, F Wilfred. (2003). Indexing and abstracting in theory and practice.3rd ed. Urbana: University of Illinois.

7   Lancaster, F. W. (1968). Information retrieval systems, characteristics, testing and evaluation. London: Facet Publishing.

8   Neelameghan, A. (1995). Online Database searching and Retrieval: Strategies, Procedures,Commands and Problems – A brief guide. Bangalore: SaradaRanganathan Endowment for Library Science.

9   Pandey, S.K. Ed. (2000). Library Information retrieval. New Delhi: Anmol.

10   Van Rijsbergen, C.J. (2004). The Geometry of Information Retrieval. Cambridge: Cambridge University Press.

LIPALT5
Library Use and User Studies
TM100(Internal Assessment30+Practice70)(Credit-04)

Objectives:
- Get to know about the importance and implication library use, user study and user education.

Learning Outcomes :

After studying this paper, students shall be able to:

- Understand the basics of user studies, enumerate the scope of user studies,
- Discuss the importance of user studies,
- Know the various direct and indirect methods of Information Seeking Behavior with the practical implication

Unit1:Information Users & Their information Needs

- Categories of Information needs
- Information needs: Definition & models
- Information Seeking behavior(ISB), Models of ISB
- Identification and assessment of users information need

Unit2:Techniques of Library & Information Centers Survey
- Questionnaire Method
- Interview Method
- Records analysis method
- Survey of Libraries and Information Centers

Unit3:User Educations & User Studies

- User Education : Concepts, Definition and Needs
- Methods and Techniques of User Studies
- Evaluation of User Studies
- Survey of Group of Users
- Review of literature on user studies

Unit4: Recent Trends
- Research output on user studies.
- Online information seeking behavior
- Information needs of person with disabilities

Reading List :

1 Alvite, L. and Barrionuevo, L. (2011). Libraries for Users: Services in Academic Libraries. Oxford: Chandos Publishing.
2 Biblarz, D., Bosch, S. and Sugnet, C. (2001). Guide to Library User Needs Assessment for Integrated Information Resource Management and Collection Management. Maryaland: Scarecrow Press, Inc.
3 Ford, N. (2015). Introduction to Information Behaviour. London: Facet Publishing.
4 Ford, N. (2015). Introduction to Information Behaviour. London: Facet Publishing.
5 Henry, M. and Morgan,S.(2002). Practical strategies for modem academic library. London: Aslib-IMI. Kawatra, P. S. (1997). Library user studies: Manual for librarians and information scientists. Mumbai, Jaico.

6   Kumar, P. S. G. (2004). Library and Users: Theory and Practice. Delhi: B. R. Publishing Corporation.

LIPATG1
Webometrics , Informatics & Scientometrics
TM100 (InternalAssessment30+Theory70)(Credit4)

Objectives:

To provide an understanding of need for library and information service support to different
types of Libraries. To help students to understand the nature of information sources, Web
metrics, Informatrics & Scientometrics

Learning Outcomes:
After studying this paper, students shall be able to:

- To get knowledge about the basic concepts of Webometrics, Informetrics,
  Scientometrics.

- Get knowledge about application of Classical Bibliometric Laws

- Get knowledge of Growth and obsolescence of literature & Science Indicators and
  Policy.

Unit 1: Information Metrics
- Basic concepts: Bibliometrics, Scientometrics, Informetrics, Webometrics –
  Meaning, definitions and scope.
- Historical development.
- Importance of Information Metrics

Unit 2: Study and application of Classical Bibliometric Laws
- Study and application of Classical Bibliometric Laws –
- Lotka's law of scientific productivity,
- Bradford's law of scatter, and
- Zipf's law of word occurrence.

Unit 3: Study of the citation concepts
- Citation analysis, citation metrics
- bibliographic coupling and co-citation analysis,
- Journal Impact Factor, Cite Score, H-index, g-index
- Citation Databases- Scopus, Web of Science & Google Scholar, Journal Citation
  Reports (JCR)

Unit 4: Growth and obsolescence of literature
- Growth and obsolescence of literature.
- Various growth models,
- The half-life analogy,
- Determination of aging factor and half life

Unit 5: Science Indicators and Policy

-   Science Indicators and Policy. Science Indicators.
-   Science Policy Development.
-    Web Impact Assessment.
-   Link Analysis.
-   Trends in informetrics

Reading List:

1 Egghe, L. and Rousseau, R. (2001). Elementary statistics for effective

Library and Information services management. London: Aslib,

2 Garfield, E. (1979). Citation Indexing: Its theory and applications in Science, technology and humanities. New York: John Wiley.

3 Meadows, A.J. (1974).Communication in Science. London: Butterworths.

4 Neuendorf, K. (2002). The content analysis guidebook. London: Sage.

5 Nicholas D. and Ritchi, M. (1979).Literature &bibliometrics. London: Clive Bingley.

6 RavichandraRao, I.K. (1985).Quantitative methods for Library and Information Science. New Delhi: Wiley Eastern.

7 Thelwall, M. (2009). Introduction to webometrics: Quantitative web research for the social Sciences. Morgan and Claypool Publishers

LIPATG2

Preservation and Conservation of Library Materials
TM100(InternalAssessment30+Theory70)(Credit4)

Objectives:
- To familiarize students with the preservation and conservation of information sources;
- To know evolution of writing materials
- To understand different types of library materials, their preservation
- To study various National Archival Initiatives of different countries
- To know Digital Preservation;
- To study record management concepts and issues;
- To understand hazards to library materials and their preservation

Learning Outcomes :

After studying this paper, students shall be able to:

- Educating students on tools and techniques of preserving information sources making them are of legal issues while digitizing and digital preservation/archives;
- Familiarize with methods and process practiced to preserve important documents in libraries;
- Knowledge of evolution of storage devices and materials used to record and preserve knowledge through ages till modern times;
- Awareness of hazards of library materials and modes used for their preservation;
- Aware of Open Archive initiatives (OAI) and nature of information accessible through those open repositories;.

Unit1: Library Material s: Preservation and Conservation

- Need of Preservation and Conservation
- Evolution of Writing Materials
- Palm leaves and Birch Bark: Their Nature and Preservation
- Manuscripts ,books ,Periodicals ,Newspapers Pamphlets etc
- Non-Book Materials

Unit 2 :Hazards to Library Materials and Control Measures

- Environmental Factors
- Biological Factors
- Chemical Factors
- Disaster Management

Unit3: Binding

- Different Types of Binding for Library Documents
- Binding Materials
- Binding Process
- Standards for Library Binding

Unit4: Restoration and Reformatting

- Material Repair
- Microfilming and Digitization
- Preservation of digital documents

Unit 5 : Digital Preservation:
- Concept, Need ,Challenges, principles
- Dimensions of digital preservation

- Strategies
- UNESCO guidelines for the digital preservation

Reading List :

1 BALLOFFET (N) and HILLE (J).Preservation and Conservation for libraries and archives. 2009. EssEss.
2 CAPLE (C). Conservation skills: judgement, method and decision making. 2000.
3 HENLERSON (K L).Ed. Conservating and preservating library materials. 1983. University Graduate school of library and information science; Ithirois.
4 KATHPALIA (Y P).Conservationand restoration of archive materials.UNESCO manual of libraries;UNESCO. PLUMBE (W J).The preservation of books in tropical and subtropical countries. 1956. OUP; London.

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Generic Elective –GE

LIPATG3

Media and Information Literacy
TM50 (InternalAssessment30+Theory70)(Credit4)

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Objectives:
Understanding of media and information literacy for providing better library services.

Learning Outcomes :

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After studying this paper, students shall be able to:

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- define media literacy;
- describe the process of media literacy;
- outline the core concepts of media literacy;
- evaluate the credibility of information;
- explain the power of visual images; and critically
  analyze media messages

Unit 1: Media and Information Literacy

- Media and Information literacy (MIL) definition, need and purpose,
- Role of MIL in the Society
- Theories and models of MIL
- MIL policies and strategies

Unit 2: Information Literacy

- Information Literacy Standards: Foundations & Implications
- Information Literacy models
- Information Literacy Guideline:UNESCO,IFLAandALA
- Curriculum development and creation of instructional manual on information
  literacy
- Information literacy products

Unit 3: ICT and Information Literacy
- Data Literacy :Definition, Importance and scope
- Digital Literacy: emerging wed service
- E-literacy
- Information literacy 2.0

Unit 4: Ethics and Laws

- Media and information ethics: cyberlaws and ethics
- Social Media Platforms and Tools
- Misinformation in Social media

Unit5: Understanding media and Society

- Defining Society and Mass Media
- Media and Public Opinion
- New Media and its Impact on Society

Reading List :

1 Media Now: Communication Media in the Information Age, By Joseph Straubhaar, Robert LaRose, Wadsworth Thomson Learning, 2000.
2 Media and Society: Challenges and Opportunities, Edited by VirBalaAggarwal, Concept Publishing Company, New Delhi, 2002.
3 Media in Society: Readings in Mass Communication, Caren J Deming, Samuel L Becker, Scott, Foresman and Company, Glenview, Illinois, 1988.
4 Introduction to Mass Communication: Media Literacy and Culture by Stanley J Baran , Edition 4 , McGraw Hill New York 2007.
5 Grassian, E. S., Kaplowitz J. R. (2009). Information Literacy Instruction: Theory and Practice. Chicago: Neal-Schuman Publishers, Inc.

Second Semester

LIPBTT1
Information Sources, Systems and Programmes
TM100(InternalAssessment30+Theory70)(Credit4)

Objectives:
Get to know about the importance and form of information source and to know difference types of information systems and program.

Learning Outcomes :
After studying this paper, students shall be able to:

- Know that information sources can be categorized by type, content and media
- Get an idea about the contents of various categories of information sources
- Gather adequate knowledge about non-print media, their types and uses in libraries and information centers

Unit1: Information Sources

- Physical medium of information
- Print Media, Multimedia (Hypermedia) and Hypertext
- Non–Print Media :Microform, Electronic and Optical Media

Unit2: Information Sources for Users

- Content Analysis and its Correlation to Clientele
- Customized Organization of Information Sources
- Citation Analysis of Information Sources and their Use
- Aid to information

Unit3:Information Products

- Nature Concept and Type
- Information Newsletter, House Bulletin, In-House communications,
- Trade Reports, Technical Digest, and Trend Reports, state-of-the–art-reports
- Electronic Content Creation

Unit 4:Information Sources, Systems and Programmes

- Information sources in Humanities
- Information sources in Social Science
- Information sources in Science and Technology
- Information sources in Management Sciences

Unit5: Information Experts as Resource Persons

- Library and Information Personnel
- Science and Technology Information Intermediaries
- Database Designers and Managers
- Media Personnel as Sources of Information

Reading List :

1   ATHERTON (Pauline): Handbook for information system and services (1997), UNESCO, Paris.

2   BAMAN (P): Studies on information systems, services and programs in India and abroad (1993) Ajanta, Delhi.

3   BARUA (B P): National policy on library and information systems and services for India: perspectives and projections. 1992. Popular Prakash an, New Delhi.

4   KOCHTANEK (TR) and MATTHEWS (JR): Library information systems: from library automation to distributed information access solutions (2002) Libraries Unlimited, West Westport.

5   NEELAMEGHAN (A) and PRASAD (K N), Eds. Information systems, networks and services in India (2 vols. 1998) Ranganathan Centre for Information Studies, Chennai.

6   VICKERY (BC): Information systems (1973) Butterworths, Washington

LIPBTT2
Management of Library and Information Centers / Institutions
TM100 (Internal Assessment30+Theory70)(Credit4)

Objectives:
- To train the student in the techniques of librarianship and management of library
- To understand the application of management theories in library and information area
- To study organizational structure of library and information centers.

Learning Outcomes :
After studying this paper, students shall be ableto:

- Familiarizing students with basic principles, practices, procedures to manage different types of libraries
- Be able to understand concepts of management, functions, and principles of scientific management
- Gain the knowledge of organizational structure
- Experience the application of management theories in library management, organization or administration.

Unit1:Advanced Management Perspectives

- Concepts and schools of Management thoughts
- Management Information Science
- Change Management: concept and need

Unit2:Human Resource Management

- Human Resource Management: Selection, Recruitment, Training, Development, Performance Appraisal
- Organizational Behavior
- Managerial Quality and Leadership
- Job Analysis and Description ; Job Evaluation

Unit3: Financial Management

- Budgetary Control and Techniques
- Costing Techniques
- Cost Analysis
- Resource Mobilization and Outsourcing

Unit4: System Analysis and Design

- Library Planning: Basic Concepts, Types and Procedures,
- SWOT (Strength, Weakness, Opportunities, Threat), DFD (Data Flow Diagram)
- Monitoring and Control Techniques,

Unit5: Collection management in electronic environment

- Electronic resources
- E-consortia
- E-Resources Life Cycle
- Selection and Acquisition of E-Resources

Reading List :

1 Bakewell, K. G. B. (1997). Managing user-centred libraries and information services. 2nd ed. London: Maxwell.
2 Bryson, J. (1996). Effective library and information management. Bombay: JaicoPub.House
3 Chatterjee, A.K. (1982). Introduction to management: Its principles and techniques. Kolkatta: World Press.
4 Crawford, J. (1997). Evaluation of library and information services effectively. 2nd ed, London: Aslib.
5 Evans, G. E. (1983). Management techniques for librarians. 2nd ed. New York: Academic Press.
6 Evans, G. E. &Layzell, P. (2007). Management basics for information professionals. 2nd ed. London: Libraries Unlimited.
7 Gautam, J. N. (1991). Library and information management. New Delhi: Prentice Hall India.
8 Georgi, C., Bellanti, R., & Holbrook, F. K. (2013). Excellence in library management. Hoboken: Taylor & Francis.
9 Gupta, K. D. (2001). Library practice for effective management, New Delhi: Indian Library Association.
10 Hayes, R. M. (2001). Models for library management, decision-making, and planning. San Diego: Calif: Academic Press.
11 Hernon, P., & Altman, E. (1998). Assessing service quality: Satisfying the expectations of library customers. Chicago: American Library Association.
12 Hendry, J. D., &Batchelor, B. (1997). How to market your library services effectively. London: Aslib.
13 Jain, A. K. (1999). Marketing information products and services: a primer for library and information professionals. New Delhi: Tata McGraw-Hill

Research Methods and Statistical Techniques
TM100(Internal Assessment30+Theory70)(Credit4)

Objectives:
- To familiarize students with concepts and types of research
- To know the research techniques and tools
- To understand the research methods and process
- To understand data analysis and interpretation
-

Learning Outcomes :
After studying this paper, students shall be able to:
- Familiar with theory of research and its methodology
- Familiar with identifying research problems and doing subject literature
- Sample size and research instrument for data collection
- Understanding the mode of data collection and data analysis
- Knowledge use of statistical tools and techniques for data analysis and interpretation of research findings

Unit1:Research Methods
- Research: Definition,Purpose, Characteristics andTypes.
- Research Methods : Historical, Experimental, Descriptive, Delphi, etc.
- Scientific Methods: Features, Spiral of Scientific Method.

Unit2:Research Design
- Selection and Formulation of Research Problem,
- Research design: definition, purpose, types
- Characteristics & advantages of a good research design
- Hypothesis: Concept, Types

Unit3: Research Techniques
- Data Collection: Meaning, Need, Purpose.
- Methods of Data Collection.
- Sampling Technique.

Unit 4: Statistical Applications
- Fundamental of Statistics
- Data Analysis and Interpretation
- Measures of CentralTendency,Dispersion, Variability and Correlation.
- T-test, Z-test, Chi-Square, etc.
- Statistical Packages.

Unit 5: Research Reporting
- Research Report: Structure, Style, Contents, and Guidelines.
- Style manuals – Chicago, MLA, APA, e-Citation, etc.
- Evaluation of Research Report.
- Plagiarism.

Reading List :

1   Bhandarkar. P.L,& Wilkinson. T. S. (1992). Methodology & techniques of social research Ed.9. Bombay: Himalaya.
2   Busha, C H & Harter, SP. (1980). Research methods in librarianship: Techniques and interpretation. New York: Academic.
3   Charles, H. et.al. (1993). Research methods in librarianship: Techniques and interpretations. New Delhi: Sage.
4   Fowler, F.J. (1993). Survey research methods. New Delhi: Sage.
5   Goode, W.J. &Hatt, P.K. (1980). Methods in social science research. New Delhi: McGraw Hill.
6   Gopal, M.H. (1990). An introduction to research procedudre in social sciences. Bombay: Asia,
7   Kothari. C.R. (1990). Research methodology. New Delhi: Wishwaprakashan.
8   Krishna Kumar (1992). Research methods in library in social science. New Delhi:Vikas.
9   Krishna, S. O. R. (1993). Methodology of research in social sciences. Bombay: Himalaya.
10 Krishnaswami, O.R.(1993). Methodology of research in social sciences. Bombay: Himalaya.
11 Leddy, P. D. (1980). Practical research: Planning design. London: Clive-Bingley.
12 Line, M.B. (1967). Library surveys. London: Clive Bingley

LIPBLT3
Information Communication Technology for Libraries (Practice)
TM100(Internal Assessment30+Practice70)(Credit 4)

Objectives:
- To give practical training in the use of library automation software
- To familiarize students with open source library software
- To familiarize the students with various operating systems
- To familiarize the students about information technology and its application to Library and– Information work
- To give basic knowledge about the software aspects and library automation packages

Learning Outcomes :
After studying this paper, students shall be able to:

- Able to understand and work on experience with IT products and services
- Have the knowledge of working with computer hardware, software
- Be trained to work with library automation and management tool
- Overall knowledge of library automation and the parts of its operations using different types of software
- Gain knowledge of both system software and application software related to library automation and management.

Unit 1:Integrated Library Management Software

- Integrated Library Software packages: SOUL / Koha
- Modules such as Acquisitions, Cataloguing, Circulation, Serial Control, Administration and OPAC
- Installation and Customization of ILMS Software

Unit 2: Digital Library Software

- Overview of Digital Library Software: D-Space, Greenstone, e-prints,
- Creation of Digital Repository through D-Space and /or Greenstone

Unit3:Web designing

- Creation of web page using HTML
- Creation of blogs

Unit4:Content Management Software
- Function and use of any Content Management Software : Joomla / Drupal / Wordpress

Note :This is only a broad outline, the coverage of topics in this paper will be elaborated by the concerned teacher.

Reading List :

1   CHOWDHURY (GG)and CHOWDHURY (Sudatta): Searching CD-ROM and Online Information Sources (2000) Library Association, London.
2   CHOWDHURY (G G) and CHOWDHURY (Sudatta): Organizing Information - from the shelf to the web (2007), Facet Publishing, London.
3   COOPER (Michael D): Design of Library Automation Systems: File Structures, Data Structures and Tools (1996), John Wiley, New York.
4   INFLIBNET: Software for University Libraries User Manual (2003), INFLIBNET, Ahmedabad.
5   NEELAMEGHAN (A) and LALITHA (SK): Tutor +: A Learning and Teaching Package on Hypertext Link Commands in WINISIS (2001), SaradaRanganathan Endowment for Library Science, Bangalore.
6   NEGUS (Christopher): Linux Bible. (2005), John Wiley, New York.
7   SIMPSON (Alan): Windows XP Bible. (2004), John Wiley, New York.
8   UNESCO. CDS/ISIS for windows: reference manual (vo1.5, 2004), UNESCO, Paris.
9   WALKENBACH (John): et al. Office 2007 Bible (2007) John Wiley, New York.
10   WINSHIP (Ian) and McNAB (Alison): The Student's Guide to the Internet (2000), Library Association, London.

Ability Enhancement Compulsory Course–AECC

LIPBLA2

Information Analysis, Repackaging and Consolidation

TM100(Internal Assessment+Practice70)(Credit2)

Objectives:

- To know about the repackaging, consolidation and analysis of information and their use and importance.
- This paper focuses to enhanced the ability of the students to know difference tools and products of IAR and how to prepare and used in practical scenario

Learning Outcomes :

After studying this paper, students shall be able to:

- highlight the impediments and difficulties associated with fruitful use of existing information
- explain the concepts of information consolidation and repackaging
- trace the origins of the concepts of information consolidation and repackaging
- assess the need for such service and explain the processes involved in information consolidation
- discuss how the concept of appropriate or consolidated information developed in conjunction with the concept of appropriate technology and technology transfer
- assess the value and benefits of consolidated information to different user communities or groups

Unit1: Repackaging and Consolidation

- Packaging and Re-Packaging: Concept, Need ,Purpose and Criteria
- Content Analysis
- Information Intermediaries

Unit2: Information Analysis and Consolidation Centre's

- Genesis of Information Analysis and Consolidation (IAC) centre's
- IAC Centre's in India

Unit3: Tools for IAR

- **Abstracting: Types and guidelines in preparing abstract**

- Indexes, Reviews, Digests, Markets Surveys

Unit4: IndexingPracticeusing PRECIS , KWIC and content aggregation and aggregators

Reading List :

1   Alberico, Ralph and Micco Mary. (1990). Expert Systems for reference and information retrieval. West port : Meckler.
2   Austin, D. Precis, (1984). A manual of concept analysis and subject indexing. 2nd ed.
3   Baeza-Yates, R. A. and Ribeiro-Neto, B. (2010). Modern Information Retrieval (2nd ed.).Reading, Massachusetts: Addison-Wesley.
4   Barbara Allan. (2002). E-learning and Teaching in library and Information Services. London : Facet Publishing.
5   Bikowitz, W. R. (2000). Knowledge Management. Delhi: PHI.
6   Chowdhruy, G. G. (2003). Introduction to Modern Information Retrieval. 2nd edn. London, Facet Publishing.
7   Cleaveland, D. B., Cleveland, A. D. (1988). Introduction to Indexing and Abstracting. 1983. Crawford, Marshall Jean. Information broking: a new career in information work. London: LA.
8   Ford, Nigel. (1991). Expert Systems and artificial intelligence : An information manager's guide London: LA.
9   James Dearnley and John Feather (2001).The Wired World: An introduction to the theory and practice of the information society. London : Facet Publishing.
10   Jean Atchison & Alan Gilchrist. (1972). Thesaurus construction: a practical manual. London: Aslib

Ability Enhancement Compulsory Course–AECC

LIPBLA4

Natural Language Processing
TM100(Internal Assessment+Practice70)(Credit2)

- Introduction to Natural Language Processing

- Tokenization
- Morphology
- Language Modeling **-**

- Part of Speech Tagging – Rule based and Machine Learning based approaches, Evaluation.

- Text Classification, Resources and Techniques.

- Context Free Grammar and Constituency
- Introduction to Lexical Semantics
- Applications of Natural Language Processing

Suggested Readings:

Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.

Croft, W. and Cruse, D. A. (2004). *Cognitive linguistics*. Cambridge: Cambridge
University Press.

Croft, W. and Lafferty, J. (eds.) (2000) Language modelling for information retrieval.   Dordrecht:
Kluwer.

Cruse, A. (1986). *Lexical Semantics*. Cambridge: Cambridge University Press.

Fellbaum, C. (1998). *WordNet: An electronic lexical database and some of its
applications*. Cambridge, MA: MIT Press.

Jurafsky , D. & Martin, J. H. (2007). *Speech and language processing: An introduction to   natural
language processing, computational linguistics, and speech recognition.*   New   Delhi: Pearson

Education.

Manning, C. D. and Schütze, H. (1999). *Foundations of statistical natural language processing.* Cambridge, MA: MIT Press.

Talmy, L. (2003). *Toward a cognitive semantics*. Cambridge, MA: MIT Press.

Vossen, P. (1998). *EuroWordNet: A multilingual database with lexical semantic networks*. Dordrecht: Kluwer .

Winograd, T. (1972). *Understanding natural language.* New York: Academic Press.

Skill Enhancement Course –SEC1

LIPBLL2

Technical Writing and Content Development

TM100(Internal Assessment30+Practice70)(Credit2)

Objectives:
To understand the Structure and Functions of Technical Communication,
Content Analysis, Content Developments.

Learning Outcomes :

After studying this paper ,students shall be able to:

- To know the technicalities of technical writing and technical
  communication,
- Get to know the process of content development
  techniques and strategies through software.

Unit1:Structure and Functions of Technical Communication

- Structure: Definition, Purpose, Characteristics and Functions
- Collection, Organization and Presentation of Data including Illustration
- Characteristic Features of Technical Writing
- Linguistic as medium of Expression of Thought

Unit2: Content Analysis

- Concept and Scope
- Technical Quantitative and Qualitative
- Content Analysis-Applications (generation of Information Services and products)

Unit3:Content Developments

- Content Development: Context setting, Norms and Guidelines
- Content Development software:JOOMALA, DRUPALetc.
- Abstract Development, Citation styles

Reading List :

1 ALRED (G J), BRUSAW (C T) and OLIU (W E), Ed. Handbook of technical writing.2003.

2 Martin's Press.BALAKRISHNAN (S) and PALIWAL (P K).Abstracting Practices in Libraries. 2001.

3 Anmol ELANEGHAN (A).Technical writing, presentation of ideas. 1975.

4 GUHA (B).Documentation and Information. 1978. World Press; Calcuuta.

5 HARRIS (J S) & BLACKE (R H).Technical writing for social scientists. 1976.

6 ICASTER (F W).Indexing and abstructing in theory and practice 1991.University of Illinois.

7 KWARTA (P S).Fundamentals of documentation. 1989. Sterling.

8 LTHA (D J).Technical literature search and the written report. 1976.

9 MAHAPATRA (P K) and CHAKRABARTY (B).Organising information in Libraries. 1999. EssEss. 10 NEELAMEGHAN (A).Technical writing, presentation of ideas. 1975.

11 RANGANATH (S R).Documentation and its facets. 1963. Asia.

12 SAMSON (D C Jr.).Editing technical writing. 1993.OUP; New York.

13 SAMSON (D C Jr.).Editing technical writing.1993.OUP; New York.Editing problems in technical writing. 1988.

14 SEETHARAMA (s).Information consolidation and repackaging. 1997.

15 ESS Solving problems in technical writing. 1988

Skill Enhancement Course –SEC2

LIPBLL3
Sources of Indian Knowledge System
TM100 (Internal Assessment30+ Practice70)(Credit2)

Objectives:
- To understand about the classics information of Indian Knowledge Systems in fields of various Discipline.
- Identify the concept of Traditional knowledge and its importance.

Learning Outcomes :

After studying this paper ,students shall be able to:

- To know about the various ancient literatures and their owners of different disciplines
- To make the students understand the traditional knowledge and analyze it and apply it to their day to day life.
- Get to know the importance of Indian literatures & their salient features
- It seek to promote interdisciplinary research on all aspect of IKS
- The program helps students develop their communication and leadership skills.

Unit 1:Indian Knowledge system

- Definition, Purpose,Concepts, Scope and Importance.
- History and Developments
- Preservation and documentation of manuscripts.
- Digital Repositories on Traditional Knowledge- TKDL,

Unit 2: Traditional Knowledge
- Definition, Purpose, Importance and their types
- Use of Traditional Knowledge in daily life
- Protection of Traditional Knowledge bill 2016

Unit 3:Evaluation/sources of Indian Knowledge Literature
- Philosophy and Religion
- Sciences & Technology
- Medicine & Therapeutics
- Literatures and Languages

Reading List :
1. Traditional Knowledge system in India, by AmitJha, 2009.
2. Knowledge traditions and Practice of India by kapilKapoor
3. Introduction to Indian Knowledge system : Concepts and Applications by B. Mahadevan ,Vinayak RajatBhat ,Nagendra Pavana
4. Indian Knowledge system Vol 2 By KapilKapoor
5. Ancient Indian Knowledge : Implication to Education System by Boski Singh
6. Chanakya Niti Evam Kautilya Arthshastra : The Principles he Effectively appied on Politics , administration Statecraft, Espionage , Diplomacy by Prof. SrikantPrasoon
7. Science In Ancient Indian : Reality versus Myth by Breakthrough Science Society (BSS)

Discipline Specific Elective –DSE

LIPBPF1

Project Work/ Dissertation/ Group Seminar
TM100 (Practice70 + Internal Assessment 30)(Credit4)

Objectives:
- To understand the structure and development of the specific subject/discipline.
- To Prepare specialized professional manpower in the subjects/disciplines for handling information related activities.
- To provide in-depth knowledge and specialized skills in handling documentary and non-documentary sources in specific field of knowledge.
- To enable the students to design and develop information system in new emerging areas / discipline
- To explore feasibility of application of information technology and the related aspects in their implementation.

Learning Outcomes :After studying this paper, students shall be able to:
- Conduct research independently on library and information sciences.
- Develop analytical and logical thinking in the process of conducting research.
- Apply the implications of library science research in generating new knowledge

Themes For DSE :
- **Business Information System**
- **Environmental Information System**
- **Biotechnology Information System**
- **Health science Information System**
- **Archival, Museum and Archaeological Information System**
- **Legal Information System**
- **Agricultural Information System**
- **Social Science Information System**
- **Industrial Information System**
- **Rural and Community Information System**

*Evaluation Criteria and Distribution of marks:

(a) Concept Note including the formulation of objectives and hypothesis-   30
(b) Review of Literature-   30
(c) Justification of scope-   10
(d) Presentation skill including ability to answer the questions-   20
(e) Resources used–   10

                           Total=   100

Discipline Specific Elective –DSE

LIPBPF2

Knowledge Discover in Database and Data Mining
TM100 (Practice70 + Internal Assessment 30)(Credit4)

- Knowledge Discovery, Process and Information Retrieval. Data Warehousing. Data warehousing and OLAP. Physical data warehouse design. Data cleaning.

- Data Mining : process, Model and algorithms

- Web Mining: Overview, Structure and Types

- Mining Social Networks
- Knowledge Discovery and Data Mining Software.

Suggested Readings:

Chakrabarti, S. (2002). *Mining the Web: Analysis of hypertext and semi structured data*. New   York: Morgan Kaufmann.
Dunham, M. H. (2003). *Data mining: Introductory and advanced*. New York: Prentice Hall

Han, J.& Kamber, M. (2005). *Data mining: Concepts and techniques*. (2nd ed.). USA: Morgan Kaufmann

Hand, D,J. & Heikki, M and Padhraic, S. (2000). *Principles of data mining*. USA: MIT

Hand, D., Mannila, H. & Smyth, P. (2001). *Principles of data mining. USA:* MIT

Steinbach, T. Kumar. (2006). *Introduction to data mining*. New York: Addison Wesley.

Roiger, R. J. & Geatz, M. W. (2003). *Data mining : A tutorial-based primer.* USA: Addison   Wesley.