

**SYLLABUS FOR UNDERGRADUATE
COURSE IN
LIBRARY & INFORMATION SCIENCE
(Bachelor of Arts Examination)**

**UNDER
CHOICE BASED CREDIT SYSTEM**

COURSE STRUCTURE FOR B.A. LIBRARY & INFORMATION SCIENCE (HONORS)

Semester	Course Name	Course Offered	Title of Paper	Credits	Marks
Semester-I					
1.1	AECC	Ability Enhancement Compulsory Course-I	English Communication /Odia/ Hindi	4	20+80=100
1.2	GE	Generic Elective-I	Users Study & Users Evaluation	6	20+80=100
1.3	Core Course	Core Course-I	Foundations of Library & Information Science	6	20+80=100
1.4	Core Course	Core Course-II	Information Sources & Services	6	20+80=100
				22	400
Semester-II					
2.1	AECC	Ability Enhancement Compulsory Course II	Environmental Studies	4	20+80=100
2.2	Generic Elective	Generic Elective -II	Library & Mass Communication	6	20+80=100
2.3	Core Course	Core Course-III	Information Processing & Retrieval	6	20+80=100
2.4	Core Course	Core Course-IV	Management of Library & Information Centers	6	20+80=100
				22	400
Semester -III					
3.1	SEC	Skill Enhancement Course -I	Preparation of Abstract	4	20+80=100
3.2	Generic Elective	Generic Elective - III	Preservation and Conservation of Library Materials	6	20+80=100
3.3	Core Course	Core Course-V	Knowledge Organization & Classification Theory	6	20+80=100
3.4	Core Course	Core Course-VI	Library Cataloguing Theory	6	20+80=100
3.5	Core Course	Core Course-VII	Library Classification , Cataloguing (Practice)	6	15+25+60=100
				28	500
Semester-IV					
4.1	SEC	Skill Enhancement Course -II	Quantitative Aptitude and Logical Thinking	4	20+80=100
4.2	Generic Elective	Generic Elective - IV	Research Methodology	6	20+80=100
4.3	Core Course	Core Course-VIII	Fundamentals of Computer	6	20+80=100
4.4	Core Course	Core Course-IX	Database Management	6	20+80=100

4.5	Core Course	Core Course-X	Library & Information Literacy	6	20+80=100
				28	500

Semester-V					
5.1	DSE	Discipline Specific Elective I	Internet Networking	6	20+80=100
5.2	DSE	Discipline Specific Elective -II	Web Based Resources & Services	6	20+80=100
5.3	Core	Core Course-XI	Academic Library System	6	20+80=100
5.4	Core Course	Core Course-XII	Public Library System	6	20+80=100
				24	400

Semester-VI					
6.1	DSE	Discipline Specific Elective -III	Information System & Programmes	6	20+80=100
6.2	DSE	Discipline Specific Elective-IV	Technical Writing	6	20+80=100
6.3	Core	Core Course-XIII	System Analysis & Design	6	20+80=100
6.4		Core Course-XIV	Marketing of Information	6	20+80=100
				24	400
TOTAL				148	2600

LIBRARY AND INFORMATION SCIENCE

HONOURS PAPERS:

Core course – 14 papers

Discipline Specific Elective – 4 papers

Generic Elective for Non Library & Information Science students – 4 papers or two papers as per University's prescription

Marks per paper - Midterm : 20 marks, End term : 80 marks, Total – 100 marks

Credit per paper – 6

Teaching hours per paper – 50 hours + 10 hours tutorial

CORE -I

FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE (THEORY)

UNIT-I INTRODUCTION

- (i) Libraries: Definition, Origin and History
- (ii) Libraries: Types, Characteristics, Functions
- (iii) Role of Libraries in the Society
- (iv) Five Laws of Library Science and Their Implications
- (v) National Information Policy: Objectives, Functions and Utility

UNIT- II INFORMATION & COMMUNICATION

- (i) Data: Definition, Features, Qualities
- (ii) Information: Definition, Properties, Role of Information
- (iii) Knowledge: Definition, Scope, Types, Use and Characteristics
- (iv) (iv) Communication: Definition, Types, Models; Information Transfer Cycle
- (v) Barriers to Communication

UNIT –III LIBRARY LEGISLATION

- (i) Salient features of Library Legislation
- (ii) Brief study of Library Acts in different states of India
- (iii) Library Acts of Odisha
- (iv) Intellectual Property Rights, Copy Right Act; Delivery of Books and News Papers (Public libraries) Act 1954 amended in 1956
- (v) Right to Information Act

UNIT –IV LIBRARY ASSOCIATION & INSTITUTIONS

- (i) Library Association: Objectives & Functions
- (ii) Role of National & International Association & Institutions
- (iii) Role of UNESCO & RRRLF for development of Libraries
- (iv) Library Education in India
- (v) Modules and Levels of Library Information Science Education

Text Books

1. Jena, Puspanjali (2008), Foundation of Library & Information Science, Bhubaneswar, Reprint
2. Kumar, Krishna (1991), Library Organization, New Delhi, Bikash Publishing House.

Reference Books

1. Kumar, P.S.G.: Fundamentals of Information Science. New Delhi; S. Chand & Company Ltd.; 1998.
2. Kawatra; P.S.: Textbook of Information Science. New Delhi; A.P.H. Publishing corporation; 2000.
3. Sharma, Pandey S.K.: Library and Society; New Delhi; Ess Ess Publications; 1988.
4. Kumar PSG , Foundations of Library and Information Science, New Delhi. B R Publishing Corporation. 2003.
5. Rout, R.K. Ed. Library Legislation in India. New Delhi: Reliance, 1999
6. Venkatappaiah, V. Indian Library Legislation, 2 Vols. New Delhi: Daya, 1990
7. Khanna, J.K. Library and Society, Kurukshetra: Research Publisher, 1987.
8. Sardana, J.L. (Ed.) :Libraries & information studies in retrospect and prospect :essays in honor of Professor B. R. Kalia, Vols. 1 & 2. New Delhi: Concept, 1990.
9. Venkatappaiah, V. & Madhusudan, M.: Public library legislation in the new millennium. New Delhi: Bookwell, 2006.
10. Ramesh Babu, B and Gopalakrishnan, S , Eds. Information, Communication, Library and Community Development , 2 Volumes, (Festschrift in honour of Prof. C.P.Vashishth), Delhi: B.R. Publishing Corporation, 2004

CORE-II

INFORMATION SOURCES & SERVICES (THEORY)

UNIT-I -REFERENCE SERVICE

- (i) Definition, need, purpose and function
- (ii) Reference services: Nature in different types of Libraries
- (iii) Ready Reference Service: Need and Purpose
- (iv) Long Range reference service: Need and Purpose
- (v) Role of Reference Librarian

UNIT-II INFORMATION SOURCES AND TOOLS

- (i) Information Sources: Primary, Secondary, Tertiary
- (ii) Kinds of Reference Books: Need and Objectives
- (iii) Evaluation of Reference Books; Encyclopaedia, Biography
- (iv) Sources of Reviews of Reference Books
- (v) Importance of Biographical, Geographical, Statistical, Handbooks, Manuals

UNIT -III BIBLIOGRAPHY AND SERVICES

- (i) Definition, Types, Objectives
- (ii) Kinds of Bibliography: Systematic/Enumerative, Analytical/Critical and Historical
- (iii) Subject Bibliographies: Scope, Usefulness
- (iv) Criteria of Evaluation of Bibliography
- (v) National Bibliography: Usages

UNIT –IV TECHNIQUES AND METHODS OF REFERENCE QUESTIONS

- (i) Reference Questions: Types and Categories
- (ii) Steps of Answering Reference Questions
- (iii) Formulation of Search Strategy
- (iv) Organization of Reference Section
- (v) Evaluation of Reference Services: Methods

Text Books

1. Padhi, Pitambar (1994): Reference sources in modern Indian Languages, Bhubaneswar, Gayatri devi Publication
2. Kumar, Krishna. (1984), Reference service, New Delhi, Vikash publishing house.

Reference Books

1. Kumar, PSG . Information Sources and Services, (Theory and Practice), New Delhi. B R Publishing Corporation. 2004.
2. Grogan, Dennis: Science & Technology: An Introduction to Literature London, Clive Bingley, 1982
3. Katz, W.A: Introduction to Reference Work, London, Butterworths, 2000
4. Sewasingh: Hand book of International Sources on Reference and Information. New Delhi: Crest Publication. 2001

CORE-III INFORMATION PROCESSING & RETRIEVAL (THEORY)

UNIT-I INFORMATION RETRIEVAL: BASIC CONCEPTS AND THEORIES

- (i) Information Retrieval: Concept, Objectives and Functions
- (ii) Document Description: Concept, Standards and Trends & Subject Indexing
- (iii) Information Services & Products: Approaches
- (iv) Designing of Information Services: CAS and SDI
- (v) Designing of Information Services: Translation services

UNIT- II INDEXING TECHNIQUES

- (i) Definition and types of indexing systems
- (ii) Subject Analysis representation, Contributions of Cutter, Kaiser, Ranganathan, Farradane & Coats
- (iii) Pre coordinate and post coordinate index system
- (iv) PRECIS, POPSI, CHAIN, UNITERM
- (v) Thesaurus in Indexing: Structure and Construction

UNIT-III ANALYSIS, CONTROLL AND SEARCH STRATEGY

- (i) Citation Analysis: Preparation of rank list of Periodicals
- (ii) Citation Index: Search strategy for SCI
- (iii) Search Techniques; Boolean Searches
- (iv) On-line Searching Techniques & Retrieval
- (v) Relevance of Judgments in Retrieval

UNIT –IV ABSTRACT & ABSTRACTING SERVICES

- (i) Definition, needs and types of abstracts
- (ii) Methodology of compilation of abstract
- (iii) Abstracting and its services
- (iv) Abstracting: Techniques, Parts and Types
- (v) Role of Abstract in Information Retrieval

Text Books

1. Choudhury, G.G.(1993), Introduction to Modern information retrieval systems, Calcutta , IASLIC.
2. Guha,B.(1998).Documentation & information techniques & systems , Calcutta, World press.

Reference Books

1. Borko, H. P., & Bernies, C. L. : Indexing concepts & methods. New York: Academic Press,1978.
2. Borko, Harold & Bernier, Charles L: Abstracting concepts & methods. New York: Academic Press, 1975.
3. Chakraborty, A. R., & Chakrabarti, B.: Indexing: Principles, Processes and Products. Calcutta: World Press, 1984.
4. Chowdhary G.C. Introduction to Modern Information Retrieval, London. Facet Publising, 2009.
5. Rajan, T. N.: Indexing Systems: concepts, models and techniques. Calcutta: IASLIC, 1981.
6. Prashar, R.G. Index and indexing system, New Delhi, Medollian Press, 1990
7. Lancaster, F.W. Indexing and Abstracting in Theory and Practice. London: Facet Publishing, 2003
8. Ramesh Babu, B . MLS 1-01 Information Processing and Retrieval (Theory), Shimogga: Kuvempu University, 2004

CORE-IV

MANAGEMENT OF LIBRARY AND INFORMATION CENTRES (THEORY)

UNIT I: LIBRARY ADMINISTRATION

- (i) Library Administration: Functions, PODSCORB
- (ii) Principles of Library Administration: Unity of Command, Scalar Chain, Delegation of Authority, Departmentation, Span of Control, Coordination, Leadership, Facilitation
- (iii) Library Authority & Library Committee: Types, Constitutions, Features and Functions
- (iv) Scientific Management: Nature, Value, Application
- (v) Personnel Management: Function, Staff Formula

UNIT-II: LIBRARY HOUSEKEEPING SERVICES

- (i) Book Selection Acquisition: Objectives, Functions
- (ii) Book Selection Tools: Types and Functions
- (iii) Processing and Circulation Services: Classification, Cataloguing
- (vi) Maintenance: Stacking and Shelving System
- (v) Binding: Specification and Types of Binding

UNIT III: LIBRARY ROUTINES & WORKFLOW

- (i) Stock Verification: Need and Methods
- (ii) Charging and Discharging Methods: Need and Methods
- (iii) Library Records: Kinds, Annual Reports,
- (iv) Library Statistics: Purpose and Types
- (v) Library Rules and Regulation: Need and Functions

UNIT IV: FINANCIAL MANAGEMENT

- (i) Fundamental Units of Library Finance
- (ii) Library Financial Resources: Public and Academic Library
- (iii) Method of Financial Estimation: Per capita method, Proportional method, Method of details
- (iv) Budgeting: Classification of Budget, Tips for Successful budget meeting
- (v) Cost Benefit Analysis:

Text Books

1. Parida Baman (1993), Fundamentals of library administration, Bhubaneswar, Panchasilla.
2. Mittal, R.L.(1984), Library administration: Theory & practice New Delhi, Metropolitan.

Reference Books

1. Kumar, PSG. Management of Libraries and Information Centers, B R Publication, Delhi. 2003
2. Narayanan, G.J. Library Management and Information of Management. New Delhi, Prentice Hall of India, 1991.
3. Seetharama, S , Guidelines of Planning & Management of Libraries & Information Centers, IASLIC 1990.
4. Evans, G. E.: Management Basics for Information Professionals. Munchen: Neal Schuman, 2000.

5. Evans, G. E. : Management techniques for librarians, 2nd ed. New York: Academic Press, 1983.

CORE -V

KNOWLEDGE ORGANIZATION (CLASSIFICATION) THEORY

UNIT I: UNIVERSE OF KNOWLEDGE

- (i) Organisation of Universe of knowledge, Concept, Methods of Acquiring and Attributes of Knowledge
- (ii) Need, Purpose and Functions of Information Organisation.
- (iii) Process of Knowledge growth and Intra Knowledge relationship
- (iv) Knowledge Production and Knowledge Distribution
- (v) Universe of Subject, Modes of formation of subjects

UNIT II: CLASSIFICATION

- (i) Definition, Need and Purpose of Classification
- (ii) Definition, Need, Purpose and Features of Library Classification
- (iii) Knowledge Classification and Library Classification
- (iv) General Theory
- (v) Dynamic Theory of Classification

UNIT III: CANONS AND PRINCIPLES

- (i) Three Planes of work and Their Relationship
- (ii) Five Fundamental Categories, Rounds and Levels
- (iii) Postulation Approach of Classification Facets and Facet Analysis
- (iv) Canons of Notational Plane
- (v) Devices and Mnemonics in Library Classification

UNIT IV: HISTORICAL DEVELOPMENT OF CLASSIFICATION SCHEMES

- (i) Library Classification Schemes: Enumerative, Faceted and Analytico-Synthetic
- (ii) Features of DDC: Structure, Notation
- (iii) Features of UDC: Structure, Notation
- (iv) (iv) Features of CC: Structure, Notation
- (v) Recent Trends in the field of Classification

Text Books

1. Kumar Krishna(1991), Theory of Classification, New Delhi, Vikash Publishing House.
2. Chakravarti, B.(1994), Library Classification Theory, Calcutta, World Press.

Reference Book

1. Dhyani, P. Library Classification, Theory and Principles New Delhi: Vishva Prakashan, 1998.
2. Hussain, Shabahat :Library classification. New Delhi: Tata McGraw Hill, 1973.
3. Husain, S.: Library Classification: Facets and Analyses. 2nd rev ed. Delhi: B R Pub, 2004.
4. Srivastava, Anand P. :Theory of knowledge classification. New Delhi: Learning Laboratory, 1992.

5. Mallby, A. ,Ed. :Sayer's manual of classification for librarians. London: Andre Deutsch, 1975.

Recommended Books:

1. Bavakutty, M. Canons of Library Classification. Trivandrum, Kerala Library Association, 1981
3. Ranganathan,S.R. Descriptive Account of the Colon Classification, Bangalore, Sarda Ranganathan Endowment for Library Science,1990
4. Ranganathan, S.R. Prolegomena to Library Classification, Ed.3, Bombay, Asia Publishing House, 1968
5. Sayers, W.C.B. Manual of classification for librarians. Revised by Arthur Maltby. Ed.5, London, Andre Deutsch, 1975

CORE -VI

LIBRARY CATALOGUING- THEORY

UNIT-I BASICS OF CATALOGUING

- (i) Library catalogue-Definition, Purpose & Function
- (ii) Types of catalogue- Dictionary & Classified
- (iii) Physical forms of Library Catalogue
- (iv) Kinds of entries- Main & Added Entries
- (v)) Normative Principles & Cannons, Rules of Choice of Headings in Monographic Publications.

UNIT- II HISTORICAL DEVELOPMENT OF CATALOGUING CODES

- (i) Historical Development of Cataloguing Codes, AACR- 2,
- (ii) Classified Catalogue Codes (CCC)
- (iii)List of Subject Headings – SLSH,
- (iv) LCSH, Subject Cataloguing
- (v) Procedures in Chain Indexing

UNIT –III NON-BOOK MATERIALS: NATURE & CHARACTERSTICS

- (i) Non-Book Materials; Scope, Nature
- (ii) Cartographic Materials,
- (iii) Manuscripts
- (iv) Microforms, Sound Recordings, Motion Pictures, Video Recordings, Magnetic Media & Optical Media: their Nature & Scope
- (v) Management of Collection, Identification & Arrangement of Non-Book Materials.

UNIT-IV NON-BOOK MATRIALS AS SOURCES OF INFORMATION

- (i) Basic feature of MARC format
- (ii) Basic feature of Dublin core
- (iii)Common feature of CCCF

- (iv) Trends of Cataloguing
- (v) Computer Applications on Cataloguing

Text Books

1. Kumar, G. and Kumar, K. Theory of Cataloguing. Rev. Ed., New Delhi, South Asia Books, 1993
2. Ranganathan, S.R. Classified Catalogue Code with additional rules for dictionary catalogue code. Ed. 5 (with amendments). Bangalore, Sarada Ranganathan Endowment for Library Science, 1989
3. Choudhury, B.K (1997), Illustrative examples in cataloguing practice, Berhampur, Learning Point.

Reference Books

1. American Library Association, et al. Anglo American Cataloging rules, Rev.Ed., London, Library Association, 1998
2. Bowman, J.H. Essential cataloguing, London, Facet Publishing, 2003
3. Hunter, E.J. and Bakewell, K.G.B. Advanced cataloguing. London, Clive Bingley, 1989
4. Miller, J. *Ed.* Sear's List of Subject Headings. Ed. 15. New York, Wilson, 19945. Read, J. Cataloguing without tears: managing knowledge in the information society. Oxford, Chandos Publishing, 2003
6. Taylore, A.G. and Miller, David P. Wynar's introduction to cataloguing and classification. Ed. 10. London, Libraries Unlimited,2006
7. Kumar, P. S. G. & Mohammad, Riaz: Cataloguing: theory and practice. New Delhi: S. Chand & Co., 1999.
8. Sengupta, Benoyendra, Cataloguing: Its theory and practice. Edn 3. Calcutta, World Press,1980
9. Vishwanathan, C. G. : Cataloguing : theory and practice, 5th rev. ed. Lucknow: Print House, 1988.

CORE –VII

LIBRARY CLASSIFICATION & CATALOGUING PRACTICE

Section-A- Library Classification Practice by using DDC & CC
Simple Subject, Compound Subject, Complex Subject

Section-B Works by Personal Authors (Single and multiple authors)

Works by Mixed responsibility
Works by Corporate authors

Text Books

1. Kumar, G. and Kumar, K. Theory of Cataloguing. Rev. Ed., New Delhi, South Asia Books, 1993
2. Ranganathan, S.R. Classified Catalogue Code with additional rules for dictionary catalogue code. Ed. 5 (with amendments). Bangalore, Sarada Ranganathan Endowment for Library Science, 1989
3. Choudhury, B.K (1997), Illustrative examples in cataloguing practice, Berhampur, Learning Point.

Reference Books

1. American Library Association, et al. Anglo American Cataloging rules, Rev.Ed., London, Library Association, 1998
2. Bowman, J.H. Essential cataloguing, London, Facet Publishing, 2003
3. Hunter, E.J. and Bakewell, K.G.B. Advanced cataloguing. London, Clive Bingley, 1989
4. Miller, J. *Ed.* Sear's List of Subject Headings. Ed. 15. New York, Wilson, 1994
5. Read, J. Cataloguing without tears: managing knowledge in the information society. Oxford, Chandos Publishing, 2003
6. Taylore, A.G. and Miller, David P. Wynar's introduction to cataloguing and classification. Ed. 10. London, Libraries Unlimited,2006
7. Rout (RK) and Choudhary (BK). A Practical manual AACR-2 1998 revision: A text book of advanced cataloguing practice. Reliance Publishing house, Delhi
8. Fothergill (Richard) Butchart (Ian). Non-Book materials in libraries: A practical guide.1990.clive bingley, London

Practical Schedules

1. Dewey, Melvil, Dewey Decimal Classification, Current Edition, Latest Edition.
2. UDC, Current Edition, Latest Edition.
3. Colon Classification, 6th Edition

CORE -VIII

FUNDAMENTALS OF COMPUTER

UNIT 1: COMPUTER BASICS

- (i) Computer: Definition, Computer Generations
- (ii) Classification of Computers Analog, Digital, Hybrid, Super, Mainframe, Mini, Micro, Macro
- (iii) Basic Components of a Computer, Computer Peripherals
- (iv) Computer Hardware & Input Devices

(v) Computer hardware: Output Devices

UNIT 2: APPLICATION SOFTWARE

- (i) Application Software: Definition, Need, Function
- (ii) Word Processing Software
- (iii) Spreadsheet Software: Ms-Excel
- (iv) Database Management Software-MS-Access
- (v) Desktop Publishing

UNIT 3: SYSTEM SOFTWARE

- (i) System Software: Meaning, Features and Functions
- (ii) Operating System: Definition, Types and Functions
- (iii) Basics of MS-DOS
- (iv) Basics of Windows Operating System
- (v) Basics of Linux Operating System

UNIT 4: PROGRAMMING LANGUAGE (PL)

- (i) Programming Language: Definition and Need
- (ii) Programming Language: Types and Functions
- (iii) HTML (Hypertext Mark-up language)
- (iv) CSS (Cascading Style Sheet)
- (vi) Web page designing with HTML and CSS

Text Books

1. Mahapatra, M. & Ramesh, D.B., Ed.(2004), Information technology application in libraries: A text book for Beginners, Bhubaneswar , Reprint.
2. Rajaramanna, V (1990), Fundamentals of computer, New Delhi, willey Eastern

Reference Books

1. Satyanarayana, N. R. (1995). A manual of computerisation in libraries. New Delhi:Wishwa Prakashan.
- 2.Sinha, P. K. (1992). Computer fundamentals: concept, systems and applications (2nd ed.). Delhi: BPB Publications.
3. Tanenbaum, A. S. (1996). Computer networks. Upper Saddle River, N.J: Prentice Hall PTR.
4. Tanenbaum, A. S. (1984). Structured computer organization. Englewood Cliffs, N.J: Prentice-Hall.
5. Arvind Kumar. Ed.(2006). Information technology for all (2 vols.). New Delhi: Anmol
6. Bansal, S.K.(2005). Information technology and globalisation, New Delhi: A.P.H. Publishing Corporation
7. Dhiman, A.K.(2003). Basics of Information technology for librarians and Information scientists, Vol.1. New Delhi: ESS ESS.
8. Sinha, P.K.(1992). Computer fundamentals: concept, systems and applications. 2nd ed. New Delhi: BPB Publications, 1992.

CORE- IX
DATABASE MANAGEMENT

UNIT-II DATABASE: CONCEPT AND COMPONENTS

- (i) Database Definition
- (ii) Different Approaches to Database
- (iii) Database Features
- (iv) Databases in Library and Information Science
- (vi) Types of databases

UNIT –II DATABASE MANAGEMENT SYSTEMS

- (i) Definitions, Basic Concepts
- (ii) Objectives of Database Management Systems (DBMS)
- (iii) Architecture of a DBMS
- (iv) Data Models
- (v) Relational Database Management Systems (RDBMS)

UNIT-III DATA STRUCTURES, FILE ORGANISATION AND PHYSICAL DATABASE DESIGN

- (i) Definitions and Basic Concepts
- (ii) Database Structures
- (iii) Files and their Organizations
- (iv) Physical Database Design

UNIT –IV FILES AND THEIR ORGANIZATIONS

- (i) File Storage Concepts
- (ii) Sequential Access Method (SAM)
- (iii) Direct Access Method (DAM)
- (iv) Physical database design
- (v) Databases in Library and Information Science

Text Books

1. Bayross, IvanN (2003). Database Concepts and Systems. Navi Mumbai:Shroff.
2. Desai, Bipin C. (1994). An Introduction to Database Systems. New Delhi:Galgotia Publication.

Reference Books

1. Anderson, D. (1989). Standard Practices in the Preparation of Bibliographic Records.London: IFLA UBCIM.
2. Ashford, J.A. and Willet, P. (1989). Text Retrieval and Document Databases. Bromley:Chartwell Bratt.

3. Date, C.J. (1990). Database: A Primer. New York: Addison-Wesley Publishing.Fidel,
4. Gredley, E. and Hopkinson, A. (1990). Exchanging Bibliographic Data: MARC andOther International Formats. Ottawa: Canadian Library Association.
5. House, William C., (ed.) (1977). Interactive Decision Oriented Database Systems.New York: Petrocelli.
6. Judge, Peter and Gerrie Brender, (ed.) (1986). Small Scale Bibliographic Databases.Sydney: Academic Press.
7. Chopra ,Rajiv Database Management Systems (DBMS). New Delhi: S Chand, 2016
8. Kedar, Seema, Database Management Systems, New Delhi: Technical Publications, 2014
9. Kashyap, M.M: Database Systems, New Delhi, Vikas, 2003

CORE-X

LIBRARY & INFORMATION LITERACY (THEORY)

UNIT-I BASICS OF INFORMATION LITERACY

- (i) Learning, Definition, Concepts and Styles of Learning
- (ii) Learning: Theories
- (iii)Information Literacy: Concepts, Definition
- (iv)Information Literacy: Theories
- (v)Information Literacy: Types

UNIT- II COMPONENTS OF INFORMATION LITERACY

- (i) Components of Information Literacy
- (ii) Assessment of Information Literacy
- (iii) Conception of Information Literacy
- (iv) Learning Strategies in Information Literacy
- (v) Concept on Information Literate person

UNIT –III INFORMATION LITERACY: STANDARDS

- (i) Standards of Information Literacy
- (ii) Performance Indicator of Information Literacy
- (iii) Outcomes of Information Literacy standards
- (iv) Levels of Information Literacy
- (v) Strategies of Information Literacy

UNIT –IV ROLE OF LIBRARY IN INFORMATION LITERACY

- (i) Basic Models of Information Literacy
- (ii) Research Models of Information Literacy
- (iii) Curriculum in Information Literacy
- (iv) Dimensions of Information Literacy Programme in Institutional Level
- (vi) Evaluation techniques of Information Literacy Competency

Text Books

1. Jena, Puspanjali (2008): Foundation of Library & Information Science, Bhubaneswar, Reprint
2. Das, K. C. Public Libraries & Literacy for Tribal Development, (2018). Best Publishing House, 5a, 4406/12, Ansari Road Daryaganj, New Delhi-110002. ISBN-978-819311-566-4

Reference Books

1. Lau, Jesus (2006) GUIDELINES ON INFORMATION LITERACY FOR LIFELONG LEARNING, IFLA (guidelines on information literacy for lifelong learning - IFLA.ORG)
2. Godwin, P., & Parker, J. (2012). Information literacy beyond Library 2.0. London: Facet Pub.

CORE- XI**ACADEMIC LIBRARY SYSTEM (THEORY)****UNIT-I DEVELOPMENT OF ACADEMIC LIBRARIES**

- (i) Higher Education and Libraries: Historical study
- (ii) Academic Libraries: Definition, Objective & functions,
- (iii) Types of Academic Libraries: Definition, Objective & functions,
- (iv) Infrastructural Design of Academic Library
- (v) Role of Academic Librarian

UNIT II COLLECTION DEVELOPMENT

- (i). Collection Development : Concept, Facets- Both Print and Non-print
- (ii) Collection development policy : objectives – Weeding out
- (iii) Collection organization and preservation: Collection evaluation
- (iv) Collection Development in different types of Academic libraries
- (v) Collection development problems with the print and electronic sources

UNIT III LIBRARY GOVERNANCE

- (i) Library Governance: Meaning and Purpose
- (ii) Library Authorities: Legislative Authorities, Executive Authorities
- (iii) Library Governing Body: Need, Powers and Functions, Types, Constitution
- (iv) Role of Library Governing Bodies in Collection Development, Committees for Collection Development
- (v) Role of Library Governing Bodies
- (vi) Library promotional Roles: Paternal Role, Participatory Role, Philanthropic Role, Friendly Role, Incremental Role

UNIT IV RESOURCE SHARING PROGRAMME

- (i) Resource sharing : Concept and its manifestations
- (ii) Library networks and Consortia: Types and functions
- (iii) INFLIBNET : Its role, objectives, programmes and present status
- (iv) Major library consortia initiatives in India
- (vi) Problems and Prospects of resource sharing, networks and consortia in India

Text Books

- 1 .Kumar Krishna.(1987), Library organization, New Delhi , Vikash publishing house.
2. Yelfand, M.A. (1974) University libraries in Developing countries, Delhi, University of Delhi.
3. Trehan, G.L. & Malhan , L.V.(1980) School library management , New Delhi , Sterling.

Reference Books

1. Despandey, K.S.(1985),University library system in India, New Delhi, Sterling.
2. Ranganathan, S.R. (1973), New educational school library, New Delhi, Vikash publishing house.
- 3.Adisheshaiah, Malcom S. (1992). Role of the Library in the University. University News.30(35),13.
4. Gelfand, M.A. (1971). University Libraries for Developing Countries. Paris:UNESCO, 24.
5. Ghanch, D.A. (1992). The Library in the University. University News. 30(35), 19-20.
6. Gupta, O.P. (1998). Library Services in University and College Libraries in India. New Delhi: Reliance Publishers.
7. Lihitkar, Shalini. R. Information Systems & Networks in India. Today& Tomorrow's printer &publishers, New Delhi, 2012.
8. Satyanarayana, R. and Rajan, T.N. (1995). Information Networks: Structure and Operation with Reference to India. INICAE, Vol. 4 (2), pp. 155-168.
9. University Grants Commission (1988). Development of an Information and Library Network (INFLIBNET) Report of the Inter-Agency Working Group. New Delhi: UGC.

CORE- P- XII

PUBLIC LIBRARY SYSTEM (THEORY)

UNIT – I PUBLIC LIBRARY: ORIGIN AND GROWTH

- (i) Introduction to Public libraries – concept, nature and characteristics
- (ii) Role of public libraries in contemporary knowledge society;
- (iii) Recommendations of National Knowledge Commission on Libraries
- (iv) Library movement in India with special reference to Odisha state

- (v) Public library Management: Human Resources Management and Financial management

UNIT II- AGENCIES IN THE PROMOTION AND DEVELOPMENT OF PUBLIC LIBRARY SYSTEM

- (i) State Government as an Agency Role
- (ii) Central Government as an Agency Role
- (iii) Raja Rammohun Roy Library Foundation
- (iv) Local Bodies-Municipalities and Panchayats
- (v) UNESCO Public Library Manifesto

UNIT III- POLICY AND LEGISLATION

- (i) National Policy on Library and Information System
- (ii) Need for a State Library Policy
- (iii) Library Legislation in India
- (iv) Model Public Library Bills/Acts in India
- (v) Comparative Study of the Public Libraries Acts

UNIT IV: ORGANIZATION OF PUBLIC LIBRARIES

- (i) Standards and norms for public libraries
- (ii) Physical facilities - library building, furniture and equipment
- (iii) Collection development – book selection and collection development policies Technical processing
- (iv) Public library services and products
- (v) Resource sharing and network activities of public libraries

Text book

1. Khanna, J.K.(1987),Library and Society, Kurukshetra, Research Publication.
2. Mangla, P. B. (1993). India: World Encyclopedia of Library and Information services, edited by Robert Wedgeworth, 3rdEd. Chicago: American Librray Association.Ministry of Education and Culture,

Reference Books

1. Verma , L.N.&Agrarwal U.K.(Ed) .(1994), Public library services in India, Udaipur , Himanshu Publication.
2. Greenwood.Majumdar, Bhalla, S., Chander, S. C., Ramesh (2003). Compendium of Select Government Reports on Library & Information Services in India. New Delhi: Central Secretariat Library.
3. Wani& Ashraf, Zahid (2008). Development of Public libraries in India: Library Philosophy and Practice. New Delhi.
4. UNESCO Public Library Manifesto, 1994. Paris: Unesco, 1995. <http://archive.ifla.org/VII/s8/unesco/eng.htm>(Accessed on 19.11.2012)
5. J. Vijaya, Kumari (2010). Public Library System. New Delhi: Anmol Publication Pvt. Ltd
6. Venkatachari, P. N. (1981). Indian Librarianship: Perspectives and Prospects edited by R. N. Sharma. New Delhi: Kalyani Publishers.
7. Guruswamy Naidu ,N. Public Library Finance. New Delhi, ESS Pub. 1990.
- 8.Ramesh Babu, B, (Ed) et al., (2003) National Seminar on New Public Library in the Information Age. Chennai: Foundation for Information and Communication.
- 9.Ekbote, Gopalrao (1987). Public Libraries System. Hyderabad: Ekbote Brothers.

- 10.RRRLF. A Comprehensive plan for rural libraries in India. Calcutta, RRLF, 1995.
- 11.Sharma,Pandey, S.K. : Development of Public Libraries in India. New Delhi.
- 12.Sharma, Pandey S. K. Public libraries in India. New Delhi: Ess Ess Publication, 1987

CORE- P- XIII

SYSTEM ANALYSIS & DESIGN

UNIT I- SYSTEM STUDY

- (i) System definition, Objectives
- (ii) System Analysis: Definition, Approaches
- (iii) Need of System Analysis in Library Management
- (iv) Components of System Study
- (v) Area of application of System Study

UNIT II- SYSTEM DESIGN

- (i) System design Scope, objectives
- (ii) Outline of System Design
- (iii) Procedure of System Study
- (iv) Guidelines for System Design
- (v) Merits of System Design

UNIT III -SYSTEM ANALYSIS

- (i) System Analysis: Definition, Objectives
- (ii) Steps of System Analysis
- (iii) Phases of System Analysis
- (iv) Application of General Techniques in System Analysis
- (v) System Modelling: Types of Models

UNIT IV -WORK STUDY IN SYSTEM ANALYSIS

- (i) Work Study: Concept, Definition
- (ii) Time study in work Measurement
- (iii) Motion Study in work Measurement
- (iv) Charting and Graphical methods in System Analysis
- (v) Application of System Analysis in different Libraries

Text Books

1. Jena, Puspanjali, System Analysis in Library Management, Reprint, Bhubaneswar
2. V. Rajaraman; Analysis and Design of Information Systems;Prentice-Hall of India Private Limited; Second Edition.

Reference Books

1. Jeffrey L.Whitten, Lonnie D.Bentley and Kevin C.Dittman; Systems Analysis and Design Methods;Tata McGraw Hill Publishing Company Limited;Fifth Edition;2000.
2. Jeffrey A. Hoffer , Joey F. George and Joseph S. Valacich; Modern Systems Analysis and Design; Pearson Education Publishing Company Limited; Third Edition;2001.

3. V. Rajaraman; Analysis and Design of Information Systems; Prentice-Hall of India Private Limited; Second Edition.
4. Jeffrey A. Hoffer, Joey F. George, Joseph S. Valacich; Modern Systems Analysis and Design; Pearson Education; Third Edition; 2002.
5. Alan Dennis, Barbara Haley Wixom; Systems Analysis and Design; John Wiley & Sons; 2002
6. Elias M. Awad; Systems Analysis and Design; Galgotia Publications; Second Edition; 1994.
7. Satzinger, J. W. Jackson R. B and. Burd S. D. Systems Analysis and Design in a Changing World, 6th ed. Boston, USA: Thomson Course Technology, 2012
8. Hoffer, Jeffrey A., George, Joey & Valacich, Joseph (2013) Modern Systems Analysis and Design ISBN: 9780273787099 (paperback).
9. Kendall, Kenneth E. and Kendall, Julie E. Systems Analysis and Design, 5th ed, Prentice Hall PTR, 2001

CORE-XIV

MARKETING OF INFORMATION & KNOWLEDGE MANAGEMENT

UNIT-I -INFORMATION MARKETING: BASICS

- (i) Marketing: Concept, Need
- (ii) Marketing Segmentation
- (iii) Marketing Mix
- (iv) Information as a commodity
- (v) Information Entrepreneurship

UNIT- II -MARKETING OF LIS PRODUCTS AND SERVICES

- (i) LIS Products and services as a Marketable Commodity: Pricing, Distribution Channels
- (ii) Information Analysis, Consolidation and Repackaging: Concept, Need
- (iii) Types of Consolidation Products
- (iv) Advertising
- (v) E-Marketing

UNIT -III-VALUING LIS RESOURCES AND SERVICES

- (i) Value: Concept, Types
- (ii) Value of LIS Services: History, Importance
- (iii) Methods in determining value in Library Services: Const-benefit
- (iv) Return on Investment
- (v) TQM

UNIT -IV-KNOWLEDGE MANAGEMENT

- (i) Knowledge Management: Concept, Scope

- (ii) Types of Knowledge
- (iii) Information Management Vs Knowledge Management
- (iv) Tools of Knowledge Management in Libraries
- (v) Role of Librarian in Knowledge Management

Text Books

1. Alavi, M., and Leidner, E.D. (2002). Knowledge Management and Knowledge Systems. In Barnes Stuart (ed) *Knowledge Management Systems: Theory and Practice*, Thomson Learning 2002
2. Dillon, W.R., Madden, T.J. & Firtle, N.H. 1993. Essentials of marketing research. Boston: Irwin.
3. Laudon Kenneth, C. and Jane Price, Laudon (1996) Management Information System. Prentice Hall Publication. N.J., USA.

Reference Books

1. Ramaswamy, V.S. and Namakumari, S. (1999) Marketing Management Planning, Implementation and Control. MACMILLAN India Limited, Delhi.
2. Saxena, Ranjan (1997) Marketing Management. Tata McGraw Hill Publication. New Delhi

DSE- I
INTERNET NETWORKING

UNIT-I NETWORKING

- (i) Networking: Components
- (ii) Types of Network
- (iii) Networking Technology
- (iv) Data Networks
- (v) Network Software

UNIT-II LIBRARY & INFORMATION NETWORK

- i) Resource Sharing
- ii) Resource Sharing Technology
- iii) Overview of Library & Information Networks
- iv) Management of Library & Information Networks
- v) Network Based Information Services

UNIT-III INTERNET TECHNOLOGY

- (i) Components of Internet
- (ii) Basic Requirement of Internet
- (iii) Internet Technology
- (iv) Internet Services
- (v) Internet, Extranet, Intranet

UNIT-IV INTERNET RESOURCES

- (i) Types of Resources
- (ii) Meta Resources
- (iii) Internet Information Resources
- (iv) Evaluation of Internet Information Resources
- (v) Usefulness of Internet for Assessment of Resources

Text Books

1. Mahapatra, M. & Ramesh, D.B., Ed.(2004), Information technology application in libraries: A text book for Beginners, Bhubaneswar , Reprint.
2. Rajaramanna, V (1990), Fundamentals of computer, New Delhi, willey Eastern

Reference Books

1. Satyanarayana, N. R. (1995). A manual of computerisation in libraries. New Delhi: Wishwa Prakashan.

2. Sinha, P. K. (1992). Computer fundamentals: concept, systems and applications (2nd ed.). Delhi: BPB Publications.
3. Tanenbaum, A. S. (1996). Computer networks. Upper Saddle River, N.J: Prentice Hall PTR.
4. Tanenbaum, A. S. (1984). Structured computer organization. Englewood Cliffs, N.J: Prentice-Hall.
5. Satyanarayan, R.(1996), Information technology & its facets , New Delhi, mammals publication.
6. Jaiswal, S.(2000), information technology today, New Delhi, Galgotia publication.
7. Chowdhary G.G and Sudatta Chowdhary: Searching CD-ROM and Online Information Sources. London: Facet Publishing,2001
8. Chowdhary G.G and Sudatta Chowdhary. Information Sources and Searching on the WWW. London: Facet Publishing, 2001
9. Lihitkar, Shalini, R. Libraries and Information centres in Maharashtra. Pimplapure Publication Nagpur, 2012.
10. Ramesh Babu, B et al, Ed. (2004). Information Management: Trends and Issues. (Festschrift in honour of Prof. S. Seetharama). New Delhi: Researchco Book Centre.

DSE-II

WEB BASED INFORMATION RESOURCES & SERVICES

UNIT-I WE BASED INFORMATION RESOURCES IN GENERAL

- (i) E-Resources on the Web: E-Books, E-Journals
- (ii) E-Databases: Bibliographic, Full Text, Numeric, Citation Searching
- (iii) Information Gateways on Web
- (iv) Open Access Databases: DOAJ, DOAR
- (v) Reference Tools on the Web: Encyclopaedias, Dictionaries, Directories etc.

UNIT-II SUBJECT BASED INFORMATION SOURCES

- (i) Web Based Social Science Information
- (ii) Web Based Information Sources in Health and Medicine
- (iii) Web Based Information Sources in Engineering
- (iv) Web Based Information Sources in Management and Law
- (v) Web Based Information Sources in Science

UNIT-III WEB INFORMATION SOURES IN LIS

- (i) Online Repository-RCLIS
- (ii) Abstracts: LISA, LISTA
- (iii) Infolibrarian
- (iv) LIS Gateways
- (v) Full Text Sources

UNIT-IV WEB BASED INFORMATION SERVICES

- (i) Web Search Engine: Primary Search Engine, Meta Search Engine
- (ii) Document Supply Services
- (iii) Federated and Centralised Search Services

- (iv) Online Social Media Services: Wiki, Blog, Social Networking
- (v) Personalised Information Services

Text Book

1. Choudhry, G.G and Choudhury, S. (2000) Searching CD-Rom and Online Information Sources, Library Association, London
2. Das, K. C. Information Needs and use of E-Resources in University Libraries.(2017). S.K.Agency.5A/12, Ansari road, Daryaganja, New Delhi-110002.ISBN 978-93-8315-876-8, p197, 2017

Reference Books

1. Balas, Janet L. (2003). Here a Blog, There a Blog, Even the Library has a Web Log. Computers in Libraries. 23(10).
2. Boss, Richard W. Library web portals. (<http://www.ala.org/ala/pla/plapubs/technotes/technotes.htm>.)
3. Cohen, Steven M. (2002). RSS for Non-Techie Librarians. <http://www.llrx.com/features/rssforlibrarians.htm>
4. Franco, Adrienne (2003). Gateways to the Internet: Finding Quality Information on Internet. Library Trends. 52(2)
5. Jones, Beverly L. "Is a microcomputer really necessary in your library setting?" In: Micromputers for Library Decision Making: Issues, Trends, and Applications. Edited by Peter Hermon and Charles R. McClure. p.3-17.
6. Tedd, Lucy A. (1993). An Introduction to Computer-based Library Systems. 3rd ed. Chichester: Wiley.

DSE-III

INFORMATION SYSTEM & PROGRAMMES

UNIT-I CONCEPTUAL FOUNDATIONS OF INFORMATION SYSTEMS

- (i) Information Systems: Types, Objectives, Functions and Components
- (ii) Organisational Activity of Information System
- (iii) Operating Elements of Information Systems
- (iv) Information Needs for Decision-Making : Information for the Intelligence Phase , Information for the Design Phase , Information for the Choice Phase ,Information for the Implementation Phase.
- (v) General Information System Theory

UNIT II MANAGEMENT INFORMATION SYSTEM (MIS)

- (i) Definition and Meaning: Scope. Objectives and Purposes of Management Information System
- (ii) Characteristics of Management Information System
- (iii) Benefits of Management Information System

- (iv) Problems and Pitfalls in Developing MIS
- (v) Management Information System for Library and Information Managers

UNIT III ORGANISATION OF INFORMATION SERVICES

- (i) Documentation and Information Centres and Databases: Definitions, Relationship to Libraries
- (ii) Types of Documentation and Information Centres: Ownership, Specialised Interest, By Different Levels
- (iii) Organisation of Documentation and Information Centres in India: Functional Organisation, Planning Process
- (iv) Growth and Development of Documentation and Information Centres in India:
- (v) Growth and Development of Documentation and Information Centres in other Developed countries

UNIT IV GROWTH OF INFORMATION SYSTEMS & PROGRAMMES

- (i) Historical Perspective, Need and Purpose
- (ii) Global Information Systems
- (iii) United Nation Information System in Science & Technology (UNISIST) and General Information Programme (PGI)
- (iv) International Nuclear Information System (INIS)
- (v) Agricultural Sciences and Technology (AGRIS)

Text Book

1. Parida Baman (1993), Studies in Information systems services & Programs, New Delhi, Ajanta.
2. Guha, B. (1983) Documentation & information Services, Calcutta, World press.

Reference Books

1. Vickery, B.C. (1973), Information systems, London, Butterworth.
2. Lazar, Peter (1985), Information systems design & management, Bangalore, Sarada Ranganathan Endowment.
3. Atherton, Pauline. Handbook of Information Systems and Services. Paris, Unesco, 1977
4. Falkeberg, Eckhard D et al., Ed. Information system concepts: Towards a consolidation of views. 1995. Chapman and Hall, London.
5. Rowley J. The basics of information system. Ed2. London, Library Association, 1996.
6. Wiseman, H.M. Information Systems, services and Centres, New York: Beeker and Hanyes, 1972

DSE-IV

DSE-IV- PROJECT (PRACTICE)

(College can give this choice only for students with above 60% aggregate marks)

A student is required to carry out a project on an issue of interest to him / her under the guidance and supervision of a teacher. In order to do so s/he must have the knowledge in research methodology and of steps in planning and conducting a research. The supervisors may help the students to go on field study / study tour relevant to their work. Class may be arranged in the routine to help students understand research methodology, planning, conduction and reporting on the research. An external examiner with the supervisor as the internal examiner will evaluate the research project on the basis of scientific methodology in writing the report and presentation skill and performance in the viva.

OR

TECHNICAL WRITING

UNIT –I CHARACTERISTICS FEATURES OF TECHNICAL WRITING

- (i) General Characteristics of Technical Writing
- (ii) Classification of Technical Communications
- (iii) Characteristics of Types, Relevant to Library and Information Field
- (iv) Professional Writings: Types
- (v) Instructional Materials

UNIT –II TARGET GROUPS AND WRITTEN COMMUNICATION

- (i) Target Group: concept, Definition, Types
- (ii) Characteristics and Types of Readers
- (iii) Reader Analysis
- (iv) Guidelines for Reader Analysis
- (v) Checklist for Reader Analysis

UNIT- III WRITING SITUATIONS AND TARGET GROUPS

- (i) Professional Writing
- (ii) Instructional Writing
- (iv) Official Memos
- (v) State of the Art

UNI-IV EDITOR AND EDITORIAL PROCESS

- (i) Editor: Concept, functions
- (ii) The Editor's Skills
- (iii) Editorial Process: Editorial Process, Creative and Substantive Editing, Copy Editing: Styling and Format

- (iv) Editorial Tools: Need and Objectives
- (v) Style Manuals

Text Book

1. IGNOU. General Principles of Writing. New Delhi: School of Humanities, CREW-1.
2. IGNOU. Jordon S. (Ed.). (1971), Handbook of Technical Writing. Vol.2.
3. Seetharama, S Guidelines for Technical writing for librarians and Information Professionals. New Delhi, Ess Ess Publications, 2015

Reference Books

1. Booth, P.F. (1991). Report Writing. 2nd ed. Kings Ripton: Huntington
2. Chandler, B.E.(1983). Technical Writer's Handbook. Ohio: American Society for Metals.
3. Eisenberg, A. (1989). Writing Well for Technical Profession. New York: Harper and Row Publishers.
4. Gerson, S.J. and Gerson, S.M. (1992). Technical Writing, Process and Product. Englewood Cliffs: Prentice Hall.
5. Hunt, T. and Ruben, B. D. (1993). Mass Communication: Producers and Consumers. New York: Harper Collins College Publishers.
6. Lennon, J. N. (1992). Technical Writing. 4th ed. Ill: Scott Foreman and Co. Glenview.
7. Locke, D. (1988). Science as Writing. New Haven: Yale University Press.
7. Neelameghan , A, . Presentation of Ideas in Technical Writing, Delhi, Vikas Pub. House, 1975
8. Evans, John. Beginner's guide to Technical writing, London: Butterworth & Co, 1983

Paper-GE-I

USER'S STUDY & USER'S EVALUATION

UNIT 1 : INFORMATION USERS

- (i) Identification of Users; Definition, Scope
- (ii) Concept of Need, Want, Demand & Requirement
- (iii) Users Categories: Planners, Policy Makers, Managers, R&D Personnel, People at Grass Root
- (iv) Information Seeking Behaviour of Different User Groups

UNIT 2: USER STUDIES & USER EDUCATION

- (i) Scope and Content of User Studies
- (ii) Studies of users by Types of Libraries: Different User Groups
- (iii) Studies of users by Different Disciplines: Critical Review of Some Large Scale User Studies
- (iv) Concept & Importance of User Education
- (v) Methods of User Education

UNIT 3: METHODOLOGY OF USER STUDIES

- (i) Qualitative & Quantitative Paradigm
- (ii) Data Collection Methods
- (iii) Other Specific Technique – Scenario Analysis, Interaction Analysis, Delphi Method and Repertory Grids
- (iv) Evaluation of User Survey
- (v) Impact of Users Studies on collection Development

UNIT 4: MODELS OF USERS STUDIES

- (i) Concept, Need of Information Seeking Behaviour of users
- (ii) Case studies of users in India
- (iii) User Studies in the Electronic Environment
- (iv) Models Information Seeking Behaviour
- (v) Theories of Information Needs & Seeking

Text Books

1. Devarajan, G. Library Information User and Use Studies. New Delhi: Beacon Books, 1995. Print.
2. Sethi, A.R. Information Seeking Behaviour of Social Scientists: An Indian Conspectus. Delhi: Himalaya Publishing, 1990. Print.
3. Girja Kumar and Krishan Kumar. Philosophy of User Education. New Delhi: Vikas, 1983. Print.

Reference Books

1. Busha, Charles H., and Stephen P. Harter. Research Methods in Librarianship: Techniques and Interpretations. New York: Academic Press, 1980. Print.
2. Eisenberg, Michael B. Information Literacy: Essential Skills for the Information Age. 2nd ed. Connecticut: Libraries Unlimited, 2005. Print
3. Fjallbrant, Nancy, and Ian Malley. User Education in Libraries. 2nd ed. London: Clive Bingley, 1984. Print.
4. Rajagopalan, T.S. "Education and Training of Information Users". Library Science 15:(1978). Print.
5. Rubin, Jeffrey. "Handbook of Usability Testing New York." (1994)

GE- II

LIBRARY & MASS COMMUNICATION

UNIT I INTRODUCTION TO COMMUNICATION

- (i) Introduction to Communications
- (ii) Elements in Mass Media
- (iii) Origin and Development of Mass Media in India
- (iv) Ownership Patterns, Organisational Structures and Management of Mass Media in India
- (v) Ethics on Professionalism

UNIT-II MASS MEDIA AND SOCIETY

- (i) Relation between Mass Media and Society
- (ii) Mass Media and Development
- (iii) Mass Media and Contemporary Social Issues
- (iv) International Communication
- (v) Media Ethics and Laws

UNIT-III REPORTING, WRITING AND EDITING

- (i) News Reporting
- (ii) Specialised Reporting
- (iii) Writing for the Press
- (iv) Writing for Radio and Television
- (v) Editing

UNIT-IV PUBLIC RELATION STRATEGIES

- (i) Definition, Nature, Ethics and Scope of Public Relations
- (ii) Principles and Functions of Public Relations
- (iii) Growth and Development of Public Relations in India

(iv)Public Relations in Government and Industry

(v)Public Relations Strategies

Text Book

1. Hishert, Ray Elden (et al). (1981). Mass Media VI: An Introduction to Modern Communication. New York: Longman.
2. Hunt, Todd and Ruben, Brent D.(1993). Mass Communication: Producers and Consumers. New York: Harper Collin -College Publishers.

Reference Books

1. Agee, Wilcox Ault. Public relations: strategies and tactics. Benjamin Cumming Pub., 2003
2. Doty, Dorothy I and Princess, Marylyn. Publicity and Public Relations. Barrons Educational Series Inc., 2007
3. Feinglass, Art. The public relations handbook for non-profits: A comprehensive and practical guide. N.J., Jossey-Bass (Wiley). 2005
4. Iyengar, Srinithi. Library Public Relations. New Delhi, Anmol, 1996
5. Agarwal, S.N. Perspectives in Library and Information Science Vol.I and II. Lucknow, Print House, 1982.
6. Feather, John. The Information Society. 2nd Ed. London, Lib. Assoc, 1998
7. Kumar, P.S.G. Information and Communication (Paper IX of UGC Model Curriculum). Delhi, B.R.Pub., 2003

Paper-GE-III

PRESERVATION AND CONSERVATION OF LIBRARY MATERIALS

UNIT-I -CONCEPT OF PRESERVATION

- (i) Preservation & Conservation: Concept, Need
- (ii) Preservation & Conservation: History of Preservation
- (iii) Preservation & Conservation: Preservation Principles
- (iv) Preservation & Conservation: Evaluation of Writing Materials
- (v) Preservation & Conservation: Periodicals & News Papers

UNIT- II-HAZARDS TO LIBRARY MATERIALS

- (i) Environmental factors: Temperature, Humidity, Light and Dust
- (ii) Biological Factors: Fungi, Insects and other pests
- (iii) Chemical Factors: Chemical used in production and preservation of Documents
- (iv) Disaster Factors: Disaster Response & Contingency Planning
- (v) Technology

UNIT –III -PREVENTIVE EMTHODS OF PRESERVATION OF LIBRARY RESOURCES

- (i) Preventive measures for environmental factors
- (ii) Preventive measures for Biological factors
- (iii) Preventive measures for Chemical Factors
- (iv) Reformatting
- (v) Care & Handling of Library Resources

UNIT –IV -CURRENT TRENDS IN PRESERVING THE LIBRARY MATERIALS

- (i) Digital Preservation: Concept
- (ii) Digital Preservation: Need & Uses
- (iii) Digital Preservation: Challenges & Strategies for Preserving Digital Contents
- (iv) Role of International/National Organizations
- (v) Indian Initiatives towards Digital Preservation

Text Books

1. Prajapati, C.L. (1997). *Archivo-Library Materials – Their Enemies and Need of First Phase Conservation*. New Delhi: Mittal Publications.
2. National Archives of India. (1988). *Repair and Preservation of Records*. New Delhi.
3. Feather, John (1996). *Preservation and the Management of Library Collections*. 2nd Ed. London: Library Association Publishing.
4. Harvey, Ross. (1994). *Preservation in libraries: principles, strategies and practices for librarians*. London : Bowker Saur.

Reference Books

1. Johnson, Arthur W. (1983). *The Practical Guide to Book Repair and Conservation*. London: Thames and Hudson.
2. Morrow, Carolyn Clark. (1983). *The Preservation Challenge: A Guide to Conserving Library Materials: Knowledge*. Industry Publications.
3. Henderson, Kathryn Luther and Henderson, William T. (ed). (1983). *Conserving and Preserving Library Materials*. Urbana Champaign: University of Illinois.
4. Fothergill, Richard and Butchart, Ian (1990). *Non-book Materials in Libraries. A Practical Guide*. London: Clive Bingley.
5. Weihs, Jean, (et al). *Non-book Materials, The Organisation of Integrated Collection*. 2nd. Ed. Canadian Library Association.
6. Matick, R. (1977). *Computer Storage Systems and Technology*. New York: Wiley

Paper-GE-IV

RESEARCH METHODOLOGY

UNIT-I FUNDAMENTAL CONCEPT OF RESEARCH

- (i) Research: Definition & Scope
- (ii) Research: Types of Research & its merits
- (iii) Research: Need & Usefulness
- (iv) Research: Types of Data & its use
- (v) Research: Problem identification & formulation

UNIT- II RESEARCH METHODS & DATA COLLECTION

- (i) Research Methods: Types
- (ii) Scientific method & its utility in research
- (iii) Data Collection: Methods
- (iv) Sampling method
- (v) Data Analysis

UNIT -III RESEARCH DESIGN & HYPOTHESES

- (i) Research Design: Concepts & Importance
- (ii) Features of a good research design, Types of research design
- (iii) Research Design: Need of Research
- (iv) Hypothesis: Scope & Need
- (v) Qualities of a good Hypothesis

UNIT -IV RESEARCH PRESENTATIONS

- (i) Research: Report Writing, Scope
- (ii) Research: Layout of a Research report
- (iii) Research: Qualities of Good Research Report Writing
- (iv) Technical Writing
- (v) Synopsis

Text Books

1. Best, John W and Kahn James, V. (1999). Research in Education. 2nd ed. New Delhi: Prentice Hall of India.
2. Busha, Charles H and Harter, Stephen H (1988). Research Methods in Librarianship: Techniques and Interpretations. New York: Academic Press.
3. Ghosh B N (1984). Scientific Method and Social Research. 2nd ed. Delhi: Sterling.
4. Krishan Kumar (1999). Research Methods in Library and Information Science. Edn.2 New Delhi: Har-Anand Publications.
5. Young, P V (1984). Scientific Social Surveys and Research. New Delhi: Prentice Hall of India

Reference Books

1. De Vaus, David (2001). Research Design in Social Research. New Delhi: SagePublications.
2. Encyclopedia of Library and Information Science (1978). Ed. by Allen Kent [et al.]Research Methodology. V. 25. NewYork: Marcell Dekker.
3. Goode, William J and Hart, Paul K (1981). Methods of Social Research. London:McGraw Hill.
4. Kerlington, Fred. Ed.(1964). Foundations of Behavioural Research, Educationaland Psychological Inquiry. New York: Rinehart and Winston.
5. Hawkins, Clifford and Sorgi, Marco. How to Plan, Speak and Write about it?
6. Thakur, Devendra (1988). Research Methodology in Social Sciences. New Delhi:Deep and Deep Publications.
7. Trochim, William M (2003). 2nd ed. Research Methods. New Delhi: Biztantra.

COURSE STRUCTURE OF B.A. LIBRARY & INFORMATION SCIENCE (PASS)

Semester	Course Name	Course Offered	Title Of Paper	Credit	Marks
	Semester-I				
1.1		DSC PASS -1	Users Study & Users Evaluation	6	20+80=100
	Semester-II				
1.2		DSC PASS -II	Library & Mass Communication	6	20+80=100
1.3	Semester-III				
1.4		DSC PASS-III	Preservation & Conservation of Library Materials	6	20+80=100
	Semester-IV				
		DSC PASS-IV	Research Methodology	6	20+80=100
2.1	Semester-V				
2.2		DSE PASS-I	Internet Networking	6	20+80=100
2.3	Semester-VI				
2.4		DSE PASS-II	Web based resources & Services	6	20+80=100

Discipline Specific Core – 4 papers
 Discipline Specific Elective – 2 papers

Marks per paper - Midterm : 20 marks, End term : 80 marks, Total – 100 marks
 Credit per paper – 6
 Teaching hours per paper – 50 hours + 10 hours tutorial

DSC PASS-I

USER'S STUDY & USER'S EVALUATION

UNIT 1 : INFORMATION USERS

- (i) Identification of Users; Definition, Scope
- (ii) Concept of Need, Want, Demand & Requirement
- (iii) Users Categories: Planners, Policy Makers, Managers, R&D Personnel, People at Grass Root
- (iv) Information Seeking Behaviour of Different User Groups

UNIT 2: USER STUDIES & USER EDUCATION

- (i) Scope and Content of User Studies
- (ii) Studies of users by Types of Libraries: Different User Groups
- (iii) Studies of users by Different Disciplines: Critical Review of Some Large Scale User Studies
- (iv) Concept & Importance of User Education
- (v) Methods of User Education

UNIT 3: METHODOLOGY OF USER STUDIES

- (i) Qualitative & Quantitative Paradigm
- (ii) Data Collection Methods
- (iii) Other Specific Technique – Scenario Analysis, Interaction Analysis, Delphi Method and Repertory Grids
- (iv) Evaluation of User Survey
- (v) Impact of Users Studies on collection Development

UNIT 4: MODELS OF USERS STUDIES

- (i) Concept, Need of Information Seeking Behaviour of users
- (ii) Case studies of users in India
- (iii) User Studies in the Electronic Environment
- (iv) Models Information Seeking Behaviour
- (v) Theories of Information Needs & Seeking

Text Books

1. Devarajan, G. Library Information User and Use Studies. New Delhi: Beacon Books, 1995. Print.
2. Sethi, A.R. Information Seeking Behaviour of Social Scientists: An Indian Conspectus. Delhi: Himalaya Publishing, 1990. Print.
3. Girja Kumar and Krishan Kumar. Philosophy of User Education. New Delhi: Vikas, 1983. Print.

Reference Books

1. Busha, Charles H., and Stephen P. Harter. Research Methods in Librarianship: Techniques and Interpretations. New York: Academic Press, 1980. Print.
2. Eisenberg, Michael B. Information Literacy: Essential Skills for the Information Age. 2nd ed. Connecticut: Libraries Unlimited, 2005. Print
3. Fjallbrant, Nancy, and Ian Malley. User Education in Libraries. 2nd ed. London: Clive Bingley, 1984. Print.
4. Rajagopalan, T.S. "Education and Training of Information Users". Library Science 15:(1978). Print.
5. Rubin, Jeffrey. "Handbook of Usability Testing New York." (1994)

DSC PASS- II**LIBRARY & MASS COMMUNICATION****UNIT I INTRODUCTION TO COMMUNICATION**

- (i) Introduction to Communications
- (ii) Elements in Mass Media
- (iii) Origin and Development of Mass Media in India
- (iv) Ownership Patterns, Organisational Structures and Management of Mass Media in India
- (v) Ethics on Professionalism

UNIT-II MASS MEDIA AND SOCIETY

- (i) Relation between Mass Media and Society
- (ii) Mass Media and Development
- (iii) Mass Media and Contemporary Social Issues
- (iv) International Communication
- (v) Media Ethics and Laws

UNIT-III REPORTING, WRITING AND EDITING

- (i) News Reporting
- (ii) Specialized Reporting
- (iii) Writing for the Press
- (iv) Writing for Radio and Television
- (v) Editing

UNIT-IV PUBLIC RELATION STRATEGIES

- (i) Definition, Nature, Ethics and Scope of Public Relations
- (ii) (ii) Principles and Functions of Public Relations
- (iii) (iii) Growth and Development of Public Relations in India
- (iv) (iv) Public Relations in Government and Industry

(v) (v)Public Relations Strategies

Text Book

1. Hishert, Ray Elden (et al). (1981). Mass Media VI: An Introduction to Modern Communication. New York: Longman.
2. Hunt, Todd and Ruben, Brent D.(1993). Mass Communication: Producers and Consumers. New York: Harper Collin -College Publishers.

Reference Books

1. Agee, Wilcox Ault. Public relations: strategies and tactics. Benjamin Cumming Pub., 2003
2. Doty, Dorothy I and Princess, Marylyn. Publicity and Public Relations. Barrons Educational Series Inc., 2007
3. Feinglass, Art. The public relations handbook for non-profits: A comprehensive and practical guide. N.J., Jossey-Bass (Wiley). 2005
4. Iyengar, Srinithi. Library Public Relations. New Delhi, Anmol, 1996
5. Agarwal, S.N. Perspectives in Library and Information Science Vol.I and II. Lucknow, Print House, 1982.
6. Feather, John. The Information Society. 2nd Ed. London, Lib. Assoc, 1998
7. Kumar, P.S.G. Information and Communication (Paper IX of UGC Model Curriculum). Delhi, B.R.Pub., 200

DSC PASS-III

PRESERVATION AND CONSERVATION OF LIBRARY MATERIALS

UNIT-I CONCEPT OF PRESERVATION

- (i) Preservation & Conservation: Concept, Need
- (ii) Preservation & Conservation: History of Preservation
- (iii) Preservation & Conservation: Preservation Principles
- (iv) Preservation & Conservation: Evaluation of Writing Materials
- (v) Preservation & Conservation: Periodicals & News Papers

UNIT- II HAZARDS TO LIBRARY MATERIALS

- (i) Environmental factors: Temperature, Humidity, Light and Dust
- (ii) Biological Factors: Fungi, Insects and other pests
- (iii) Chemical Factors: Chemical used in production and preservation of Documents
- (iv) Disaster Factors: Disaster Response & Contingency Planning
- (v) Technology

UNIT –III PREVENTIVE EMTHODS OF PRESERVATION OF LIBRARY RESOURCES

- (i) Preventive measures for environmental factors
- (ii) Preventive measures for Biological factors
- (iii) Preventive measures for Chemical Factors
- (iv) Reformatting
- (v) Care & Handling of Library Resources

UNIT –IV CURRENT TRENDS IN PRESERVING THE LIBRARY MATERIALS

- (i) Digital Preservation: Concept
- (ii) Digital Preservation: Need & Uses
- (iii) Digital Preservation: Challenges & Strategies for Preserving Digital Contents
- (iv) Role of International/National Organizations
- (v) Indian Initiatives towards Digital Preservation

Text Books

1. Prajapati, C.L. (1997). *Archivo-Library Materials – Their Enemies and Need of First Phase Conservation*. New Delhi: Mittal Publications.
2. National Archives of India. (1988). *Repair and Preservation of Records*. New Delhi.
3. Feather, John (1996). *Preservation and the Management of Library Collections*. 2nd Ed. London: Library Association Publishing.
4. Harvey, Ross. (1994). *Preservation in libraries: principles, strategies and practices for librarians*. London : Bowker Saur.

Reference Books

1. Johnson, Arthur W. (1983). *The Practical Guide to Book Repair and Conservation*. London: Thames and Hudson.
2. Morrow, Carolyn Clark. (1983). *The Preservation Challenge: A Guide to Conserving Library Materials: Knowledge*. Industry Publications.
3. Henderson, Kathryn Luther and Henderson, William T. (ed). (1983). *Conserving and Preserving Library Materials*. Urbana Champaign: University of Illinois.
4. Fothergill, Richard and Butchart, Ian (1990). *Non-book Materials in Libraries. A Practical Guide*. London: Clive Bingley.
5. Weihs, Jean, (et al). *Non-book Materials, The Organisation of Integrated Collection*. 2nd. Ed. Canadian Library Association.
6. Matick, R. (1977). *Computer Storage Systems and Technology*. New York: Wiley

DSC PASS- IV

RESEARCH METHODOLOGY

UNIT-I FUNDAMENTAL CONCEPT OF RESEARCH

- (i) Research: Definition & Scope
- (ii) Research: Types of Research & its merits
- (iii) Research: Need & Usefulness
- (iv) Research: Types of Data & its use

- (v) Research: Problem identification & formulation

UNIT- II RESEARCH METHODS & DATA COLLECTION

- (i) Research Methods: Types
- (ii) Scientific method & its utility in research
- (iii) Data Collection: Methods
- (iv) Sampling method
- (v) Data Analysis

UNIT -III RESEARCH DESIGN & HYPOTHESES

- (i) Research Design: Concepts & Importance
- (ii) Features of a good research design, Types of research design
- (iii) Research Design: Need of Research
- (iv) Hypothesis: Scope & Need
- (v) Qualities of a good Hypothesis

UNIT -IV RESEARCH PRESENTATIONS

- (i) Research: Report Writing, Scope
- (ii) Research: Layout of a Research report
- (iii) Research: Qualities of Good Research Report Writing
- (iv) Technical Writing
- (v) Synopsis

Text Books

1. Best, John W and Kahn James, V. (1999). Research in Education. 2nd ed. New Delhi: Prentice Hall of India.
2. Busha, Charles H and Harter, Stephen H (1988). Research Methods in Librarianship: Techniques and Interpretations. New York: Academic Press.
3. Ghosh B N (1984). Scientific Method and Social Research. 2nd ed. Delhi: Sterling.
4. Krishan Kumar (1999). Research Methods in Library and Information Science. Edn.2 New Delhi: Har-Anand Publications.
5. Young, P V (1984). Scientific Social Surveys and Research. New Delhi: Prentice Hall of India

Reference Books

1. De Vaus, David (2001). Research Design in Social Research. New Delhi: Sage Publications.
2. Encyclopedia of Library and Information Science (1978). Ed. by Allen Kent [et al.] Research Methodology. V. 25. New York: Marcell Dekker.
3. Goode, William J and Hart, Paul K (1981). Methods of Social Research. London: McGraw Hill.
4. Kerlinton, Fred. Ed. (1964). Foundations of Behavioural Research, Educational and Psychological Inquiry. New York: Rinehart and Winston.
5. Hawkins, Clifford and Sorgi, Marco. How to Plan, Speak and Write about it?

6. Thakur, Devendra (1988). Research Methodology in Social Sciences. New Delhi:Deep and Deep Publications.
7. Trochim, William M (2003). 2nd ed. Research Methods. New Delhi: Biztantra.

DSE- PASS-I

INTERNET NETWORKING

UNIT-I NETWORKING

- (i) Networking: Components
- (ii)Types of Network
- (iii)Networking Technology
- (iv)Data Networks
- (v) Network Software

UNIT-II LIBRARY & INFORMATION NETWORK

- (I) Resource Sharing
- (ii)Resource Sharing Technology
- (iii)Overview of Library & Information Networks
- (iv)Management of Library & Information Networks
- (v) Network Based Information Services

UNIT-III INTERNET TECHNOLOGY

- (i) Components of Internet
- (ii) Basic Requirement of Internet
- (iii) Internet Technology
- (iv)Interment Services
- (v) Internet, Extranet, Internet

UNIT-IV INTERNET RESOURCES

- (i) Types of Resources
- (ii)Meta Resources
- (iii)Internet Information Resources
- (iv)Evaluation of Internet Information Resources
- (v) Usefulness of Internet for Assessment of Resources

Text Books

1. Mahapatra, M. & Ramesh, D.B., Ed.(2004), Information technology application in libraries: A text book for Beginners, Bhubaneswar , Reprint.
2. Rajaramanna, V (1990), Fundamentals of computer, New Delhi, willey Eastern

Reference Books

1. Satyanarayana, N. R. (1995). A manual of computerisation in libraries. New Delhi: Wishwa Prakashan.
- 2.Sinha, P. K. (1992). Computer fundamentals: concept, systems and applications (2nd ed.). Delhi: BPB Publications.

3. Tanenbaum, A. S. (1996). Computer networks. Upper Saddle River, N.J: Prentice Hall PTR.
4. Tanenbaum, A. S. (1984). Structured computer organization. Englewood Cliffs, N.J: Prentice-Hall.
5. Satyanarayan, R.(1996), Information technology & its facets , New Delhi, mammals publication.
6. Jaiswal, S.(2000), information technology today, New Delhi, Galgotia publication.
7. Chowdhary G.G and Sudatta Chowdhary: Searching CD-ROM and Online Information Sources. London: Facet Publishing,2001
8. Chowdhary G.G and Sudatta Chowdhary. Information Sources and Searching on the WWW. London: Facet Publishing, 2001
9. Lihitkar, Shalini, R. Libraries and Information centres in Maharashtra. Pimplapure Publication Nagpur, 2012.
10. Ramesh Babu, B et al, Ed. (2004). Information Management: Trends and Issues. (Festschrift in honour of Prof. S. Seetharama). New Delhi: Researchco Book Centre.

DSE-PASS-II

WEB BASED INFORMATION RESOURCES & SERVICES

UNIT-I WE BASED INFORMATION RESOURCES IN GENERAL

- (i) E-Resources on the Web: E-Books, E-Journals
- (ii) E-Databases: Bibliographic, Full Text, Numeric, Citation Searching
- (iii) Information Gateways on Web
- (iv) Open Access Databases: DOAJ, DOAR
- (v) Reference Tools on the Web: Encyclopaedias, Dictionaries, Directories etc.

UNIT-II SUBJECT BASED INFORMATION SOURCES

- (i) Web Based Social Science Information
- (ii) Web Based Information Sources in Health and Medicine
- (iii) Web Based Information Sources in Engineering
- (iv) Web Based Information Sources in Management and Law
- (v) Web Based Information Sources in Science

UNIT-III WEB INFORMATION SOURCES IN LIS

- (i) Online Repository-RCLIS
- (ii) Abstracts: LISA, LISTA
- (iii) Infolibrarian
- (iv) LIS Gateways

(v)Full Text Sources

UNIT-IV WEB BASED INFORMATION SERVICES

- (i) Web Search Engine: Primary Search Engine, Meta Search Engine
- (ii) Document Supply Services
- (iii) Federated and Centralised Search Services
- (iv) Online Social Media Services: Wiki, Blog, Social Networking
- (v) Personalised Information Services

Text Book

1. Choudhury, G.G and Choudhury, S. (2000) Searching CD-Rom and Online Information Sources, Library Association, London
2. Das, K. C. Information Needs and use of E-Resources in University Libraries.(2017). S.K.Agency.5A/12, Ansari road, Daryaganja, New Delhi

Reference Books

1. Balas, Janet L. (2003). Here a Blog, There a Blog, Even the Library has a Web Log. Computers in Libraries. 23(10).
2. Boss, Richard W. Library web portals. (<http://www.ala.org/ala/pla/plapubs/technotes/technotes.htm>.)
3. Cohen, Steven M. (2002). RSS for Non-Techie Librarians. <http://www.llrx.com/features/rssforlibrarians.htm>
4. Franco, Adrienne (2003). Gateways to the Internet: Finding Quality Information on Internet. Library Trends. 52(2)
5. Jones, Beverly L. "Is a microcomputer really necessary in your library setting?" In: Micromputers for Library Decision Making: Issues, Trends, and Applications. Edited by Peter Hermon and Charles R. McClure. p.3-17.
6. Tedd, Lucy A. (1993). An Introduction to Computer-based Library Systems. 3rd ed. Chichester: Wiley.

TOPIC FOR TRAINING FOR TEACHERS

1. Web based resources & Services
2. Technical Writing
3. System Analysis & Design
4. Marketing of Information
5. Internet Networking

LAB EQUIPMENT

1. Dewey Decimal Classification and Relative Index

By Melvil Dewey (Author), Joan S. Mitchell (Editor), Julianne Beall (Editor), Rebecca Green (Editor), Giles Martin (Editor)

Publisher-OCLC

2. Colon Classification (Sixth Edition) by Dr. S. R. Rangangthan

Publisher -Sarada Ranganathan Endowment for Library Science

