

**MASTER OF LIBRARY  
AND INFORMATION  
SCIENCE (M.Lib.I.Sc)**

Sl. No.	Course Code	Title of the Course	CIA Max.	ESE Max.	TOT Max	C Max.
<b>FIRST YEAR</b>						
<b>I Semester</b>						
1.	<b>32311</b>	Information Processing and Retrieval	25	75	100	4
2.	<b>32312</b>	Library and Information System Management	25	75	100	4
3.	<b>32313</b>	Information Technology and information Systems	25	75	100	4
4.	<b>32314</b>	Information Technology (Practice)	25	75	100	4
		<b>Total</b>	<b>100</b>	<b>300</b>	<b>400</b>	<b>16</b>
<b>II Semester</b>						
5.	<b>32321</b>	Academic Library System	25	75	100	4
6.	<b>32322</b>	Technical Writing	25	75	100	4
7.	<b>32323</b>	Research Methodology	25	75	100	4
8.	<b>32324</b>	Information Processing and Retrieval (Practice)	25	75	100	4
		<b>Total</b>	<b>100</b>	<b>300</b>	<b>400</b>	<b>16</b>
		<b>Grand Total</b>	<b>200</b>	<b>600</b>	<b>800</b>	<b>32</b>

**Course Code : 32311**

**Paper 1: INFORMATION PROCESSING & RETRIEVAL**

**BLOCK I: CLASSIFICATION SCHEMES**

**Unit I**

Concepts of Information transfer – Universe of subjects

**Unit II**

Structure & development – Impact on the schemes for classification - CC, DDC, UDC, & LC

**BLOCK II: INDEXING TECHNIQUES**

**Unit III**

Indexing Languages – Vocabulary Control – Thesaurus

**Unit IV**

Design of indexing languages, general theory of subject indexing languages.

**Unit V**

Indexing Systems & Techniques – Pre coordinate indexing – PRECIS, POPSI, Chain indexing – Relational indexing,

**Unit VI**

Post Coordinate Indexing Systems, Uniterm Indexing, Citation Indexing, KWIC and KWOC, Evaluative Studies – Crane field. I.

**BLOCK III: BIBLIOGRAPHIC STANDARDS AND FORMATS**

**Unit VII**

Bibliographic Standards – ISBD, (G), AACR 2R, ISBN, ISDN, ISSN, ISO 2709

**Unit VIII**

Bibliographic Formats - Bibliographic Standards : MARC, CCF, UNIMARC, MARC21, MARC XML, Dublin Core Z39.5.

**BLOCK IV: INFORMATION RETRIEVAL SYSTEM**

**Unit IX**

Information Retrieval System – Structure, Functions and Components

**Unit X**

Search strategy – Criteria for evaluation – Recall, Precision – Relevance and failure analysis.

**BLOCK V: WEB TECHNOLOGY**

## **Unit XI**

Boolean logic, limitations of Boolean logic, processing query expression: rules for operations

## **Unit XII**

Recent Trends in IRS - Internet information retrieval - Web-based information retrieval

## **Unit XIII**

Automatic Indexing, Web Ontology

## **Unit XIV**

Sequential file, structure of a sequential file, inverted file, structure of an index file, matching criteria,

## **SUGGESTED READINGS:**

1. Alberico, R. and Micco M.(1990). Expert systems for reference and Information retrieval. West Port : Meckler.
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. 2nd ed.
4. Chowdhry, 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. Ghosh, S.B. and Biswas, S.C. (1998). Subject Indexing systems: Concepts, methods and techniques. Rev. ed. Calcutta: IASLIC.
7. Lancaster, F. W. (1968). Information retrieval systems, characteristics, testing and evaluation. London: Facet Publishing.
8. Pandey, S.K. Ed.(2000).Library Information retrieval. New Delhi: Anmol.
9. Seetharama, S. (1997).Information consolidation and repackaging. New Delhi: ESS ESS.
10. Vickery, B.C.(1970). Techniques of Information retrieval. London: Butterworths.

**Course Code : 32312**

**Paper 2: LIBRARY AND INFORMATION SYSTEM MANAGEMENT**

**BLOCK I: LIBRARY MANAGEMENT AND THOUGHTS**

**Unit I**

Concept of management and organization – Definition – Library and information system as Non Profit Organizations – Library as a system - Organisational Structure of different types of library

**Unit II**

Various Schools of Management Thought: Classical, Human relations

**Unit III**

Behavioral schools of thought – Management theories: Taylor, Fayol, Gantt, McGregor, Maslow.

**BLOCK II: MANAGEMENT PRINCIPLES**

**Unit IV**

Concept and principles of Scientific Management – Definition and scope – Methodology – Advantages and limitations. Application of Scientific Management principles to Library and Information Centres

**Unit VI**

Systems approach – Systems analysis in library and information systems – Contingency approach – Decision making approach, MBO, POSDCORB

**BLOCK III: COLLECTION DEVELOPMENT POLICY**

**Unit VII**

Collection Management: Policy and procedures for print and non-print resources including print and ejournals - Selection criteria and tools - Barriers of acquisition including licensing of electronic resources

-Library security.

**BLOCK IV: MANAGEMENT INFORMATION SYSTEM**

**Unit VIII**

Management Information System (MIS) – Designing – Work Analysis – Flow process

chart –

Decision flow charts, Block diagram, Gantt chart, network analysis, PERT and CPM.

### **Unit IX**

Housekeeping Operations: Book / Information Resource selection and acquisition section, License negotiation and relevant rights issues - Technical processing section- Serial control and circulation control Policy, procedures and methods of maintenance and stock verification -- Collection evaluation and weeding out

## **BLOCK V: HUMAN RESOURCE MANAGEMENT**

### **Unit X**

Personnel management – Human resources planning – Recruitment – Selection – Training and Development - Performance appraisal promotion – Motivation.

### **Unit XI**

Financial Management - Sources of Library Finance in different types of libraries - Budget techniques and method, budgetary control - Costing library process, functions and services - Cost effectiveness and Cost benefit analysis Report writing and Library Statistics

### **Unit XII**

Building and space management of library and information centres - Safety issues - Equipments and furniture- in addition for differently able people - Library standards - Indian and International

## **BLOCK VI: ELECTRONIC LIBRARY &TQM**

### **Unit XIII**

Management of Electronic libraries - Job descriptions of IT manager - Evaluation of IT - Technology Assessment –Equipment, Infrastructure, Service, Staff, Self - Technology development –upadation

### **Unit XIV**

Total Quality Management : Concept, Definition, Elements - Operations Management Systems - Tools and techniques for improving quality-Inventory planning and control, - Inventory control model - Quality Audit, LIS related

Standards - Resource mobilization, Outsourcing, Library Consortia, Open Access  
- Technology Management

### **SUGGESTED READINGS:**

1. Evans, G Edward. Developing Library and Information centre Collections. New York, Libraries Unlimited, 2005
2. Evans, G Edward: Management techniques for librarians, 2nd Ed., New York, Academic Press, 1983.
3. Gorman, G.E. International yearbook of Library and Information management 2003- 2004 metadata applications and management. London, L.A., 2003
4. Kishan Kumar. Management of libraries in Electronic environment. Delhi, Har-Anand Publications, 2007
5. Kishore, Jugal. Personal Management in Libraries. Delhi, EssEss, 1981
6. Krishna Kumar. Library Administration and Management. Delhi, Vikas, 2004
7. Kumar, P.S.G. Management of Library and Information Centres (paper V of UGC Model Curriculum). Delhi, B.R.Pub., 2003
8. Lahiri, Ramansu. Management of Libraries concepts and practices. New Delhi, EssEss, 1996
9. Lancaster, F.W. Technology and Management in Library and Information Services. London, Lib. Assoc., 1997
10. Bavakutty, M & Majeed, Abdul. Methods for Measuring Quality of Libraries. ISBN : 81-7000-439-X , 2005

**Course Code : 32313**

**Paper 3: INFORMATION TECHNOLOGY & INFORMATION SYSTEMS**

## **BLOCK I: FUNDAMENTALS OF COMPUTERS**

### **Unit I**

Computer basics – Computer generations and classification - Understanding IT and components of IT Computers and Communication Technologies (Data Process Cycles and Operations)

### **Unit II**

Role of Computers in information transfer. Block Diagram of Computer - Classification of computers – Analog and Digital - Generation of computers Stand alone systems including Note Books and Servers

### **Unit III**

Input / Output Devices: ❖ Understanding Personal Computer: CPU, Storage and Input/Output Devices, RAM and ROM, USB, Hard Discs, Scanners and Digital Camera, Joysticks & Printers

## **BLOCK II: STANDARD NUMBERS AND OPERATING SYSTEM**

### **Unit IV**

Data presentation in Computers: Binary Number System, Overview of Character Coding Standards- ASCII and UNICODE

### **Unit V**

Computer Software : Windows, LINUX - System and Application Software - Programming Concepts - Open Source and Proprietary Library Software.

## **BLOCK III: DATABASE MANAGEMENT SYSTEM**

### **Unit VI**

File Organisation: Files and Databases, Data Elements, Fields, Records, DBMS and RDBM Packages - Database models – Hierarchical, network, relational. Unit VII

Planning of Information System. Database system – Definition, scope, need and purpose - Basic features of WINISIS and MS Access

### **Unit VIII**

Information System analysis and Design – Overview, components, System



## **BLOCK IV: COMPUTER HARDWARE/SOFTWARE AND NETWORKING**

### **Unit IX**

Hardware and software management : Server configuration - Managing the servers - Backups - RAID application - Software licensing- AMC issues

### **Unit X**

Networking: Technological development in communication: Transmission media - Digital Networks – LAN, WAN, PSTN, ISDN

## **BLOCK V: LIBRARY AUTOMATION / NETWORKS**

### **Unit XI**

**Library Automation :**Basic: Retrospective Conversion Techniques , Library Automation Software – OPAC - Automation Identification Methods: Bar coding, RFID - Selection criteria - for hardware and software - Library Automation Software – Open source / Commercial

### **Unit XII**

Communication : Land line and Mobile networks - Data transmission in telephone networks with Major Telecommunication –Networks - Motivation for ISDN and ISDN channels - User interfaces - Broadband ISDN Optical Communication systems, FAX, Modem, Teletext, Videotext, email, Internet, and Intranet.

### **Unit XIII**

National Information Systems – : NISCAIR (formerly INSDOC),  
DESIDOC, SENDOC, INFLIBNET, DELNET

### **Unit XIV**

International Information Systems - – INIS, AGRIS, BIOSYS – Open  
Office Tools. National Information Systems

## **SUGGESTED READINGS:**

1. Balakrishanan, Shyama&Paliwal, P.K. Current Scenario of Information Technology.Delhi, Anmol, 2001
2. Brophy, Rowley. The basics of information systems. London, Library Association, 1996.
3. Dhiman, A.K. Basics of Information Technology for Library and Information

- Scientists. 2 Vols., Delhi, EssEss, 2003
4. Kumar, P.S.G. Information Technology: Basics: (Paper IV of UGC Model Curriculum). Delhi, B.R.Pub., 2003
  5. Mohamed Acly and Gill, Needham, Eds. M- Libraries 3: Transforming libraries with Mobil technology. Chennai: Allied, 2012.
  6. Microsoft Corporation. Microsoft Visual C++ 6.0 RUN - TIME Library Reference – Vol.4. Washington, Microsoft Press, 1998.
  7. Kumar, P.S.G. Information Technology: Basics: (Paper IV of UGC Model Curriculum). Delhi, B.R.Pub., 2003

### **Practice**

1. Creating a database using MS – Access, My SQL
2. Thorough Knowledge of MS-Word, MS-EXCEL & and Power Point.
3. Installing and searching CD-ROM Database and Online Databases
4. Formulating Queries and searching using Boolean Operators.

## **Paper -5 ACADEMIC LIBRARY SYSTEM**

### **BLOCK I : ACADEMIC LIBRARY FUNCTIONS**

#### **Unit I**

Types of Libraries – Role of Academic libraries and functions of higher education

#### **Unit II**

Growth of University and College libraries in India and the role of UGC and other

#### **Unit III**

National Bodies in promoting Academic Libraries.

### **BLOCK II: LIBRARY INFRASTRUCTURE**

#### **Unit IV**

Authorities in University/college libraries – Budgeting – Collection Building – problems and methods

#### **Unit V**

Centralization & Decentralization of University Libraries – Merits and Demerits

### **BLOCK III: RESOURCE SHARING**

#### **Unit VI**

Resource Sharing and – Networking – Role of INFLIBNET

#### **Unit VII**

Academic libraries – Types of users & their information needs

#### **Unit VIII**

User education and services – User behavior and user studies.

#### **Unit IX**

Staffing Pattern – staff Formula – standards for Academic Libraries

### **BLOCK IV: LIBRARY AUTOMATION DIGITAL LIBRARY**

#### **Unit X**

Automation in academic libraries – Impact of information technology on academic library services

## **Unit XI**

Electronic Library, Digital Library, Virtual Library.

## **Unit XII**

Library Building – Furniture's and equipment's

## **BLOCK V: PRESERVATION AND CONSERVATION**

### **Unit XIII**

Preservation and Conservation of Library Materials – Methods and Techniques.

### **Unit XIV**

Recent developments of academic libraries and its Services

### **SUGGESTED READINGS:**

1. American Association of School Librarians. Standards for school library programmes. 1969. ALA, Chicago (Latest).
2. Baker, David, Ed. Resource management in academic libraries. 1997. L.A.London.
3. Balakrishanan, Shyama&Paliwal, P.K. Academic Library automation
4. Bavakuty, M. Libraries in Higher Education. ESS ESS Pub., 1988
5. BhaskaraRao, P. Information Networks and Resource sharing. Delhi, Reliance, 1998
6. Brophy, Peter. The academic library. 2000. Library Association, London.
7. Chapman, Liz. Managing acquisitions in library and information services 2001. Library Association, London.
8. Jordon, Peter. The academic library and its users.1998. Gower, London.
9. Lyle, G R. Administration of the college library. Ed. 4. 1974. Wilson, New York.
10. Metcalf, K D. Planning academic and research library building. 1965. McGraw Hill, New York.

**Course Code : 32322**  
**Paper 6: TECHNICAL WRITING**

**BLOCK I: COMMUNICATION SYSTEM**

**Unit I**

Communication Process – Characteristic features of technical writing -  
Reader-writer relationship.

**Unit II**

Types of Communication – Verbal, Non-Verbal, Written - Effective  
Communication Skills, Oral and Written Communication Skills

**Unit III**

Language as a medium for communication of thought - Body language and  
common gestures  
- Meeting, Telephonic Communication and Presentation Skills - Good  
Questioning and Listening Skills

**Unit IV**

Characteristics and features of technical writing - Target groups in written  
communication- Level of technicality in Scientific Communication -  
Readability and text – Aberrations in technical writing.

**BLOCK II: PUBLICATION & STYLE FORMAT**

**Unit V**

Organization and Presentation of data in abstracts, textual manner, references

**Unit VI**

Preparation of popular articles, technical reports, monographs, house journals.

**Unit VII**

Repackaging of information: Preparation of Review, Trend report, Progress  
report.

**Unit VIII**

Editorial Process: Editorial tools, use of style manuals - proof reading – Role of  
Editor –  
Publication

**Unit IX**

Use of style manuals - APA, MLA and Chicago style manuals using MS Word  
and Zotero

## **BLOCK III: REPORT WRITING**

### **Unit X**

Office Communication: Report Writing : Annual Report, Daily Progress Report, Event Report, Promotion - Report, Confidential Report, User Satisfaction Report - Office Writing: Notice Writing, Memo Writing, - Letter Writing – Publisher, Book - Seller, Binders, Users- Patrons- Clienteles, = ♦ Presentation: Body language, Book review, At the time of Library

Committee meeting, Staff meeting, Condolence meeting, Business meeting, Orientation, Conference, Seminars or Workshop – Training Programme

### **Unit XI**

Categories of Technical Communication : Structure, function and types of Technical communication - Definition, purpose, characteristics of Technical Communication

### **Unit XII**

Technical papers / Articles, Review articles, Technical Reports, Monographs, Dissertations, In-House bulletins - Information analysis, Consolidation and Repackaging Products- Technical Digest, - Trend Reports, State-of-the-art Reports, Annual Reports, Manuals, Handbooks and Directories

## **BLOCK IV: BUSINESS**

### **COMMUNICATIONS**

### **Unit XIII**

Business Writing: Business Plan and Mission Writing - Terms and Condition with Book Sellers, Publishers, Venders, Service Providers - MOUs – Licensing, Contract Writing - Effective Covering Letters - Publisher, Book Seller, Binders, Users-Patrons- Clienteles

### **Unit XIV**

Legal Issues : Freedom of information and privacy- Intellectual property in media - Database rights - Patents and Tread Marks - Quality issues and liabilities of Ethics – Pre-publication and post-publication process.

### **SUGGESTED READINGS:**

1. Gordon, H. M. and Walter J. A. *Technical Writing*. 5th ed. London: Holt, 1986.
2. James, H. S. *Handbook of Technical Writing*. NTC Business Books, 2010.
3. Richard, W. S. *Technical Writing*. New York: Barnes and Noble, 2008.
4. Krishnan Kumar, *Research Libraries in Developing Countries*.
5. Santhosh Gupta, *Research Methodology and Statistical Techniques*, New Delhi: Deep & Deep, 2000.
6. Lancaster FW, *information Retrieval Systems*, Ed- 2, 1976.



**Course Code : 32323**  
**Paper 7: RESEARCH METHODOLOGY**

**BLOCK I: FUNDAMENTALS OF RESEARCH**

**Unit I**

Foundations of research; Nature, definition and objectives - Types of research, Basis Concepts of research; Scientific Method; Ethical consideration of research.

**Unit II**

Library and Information Science (LIS) as an interdisciplinary subject, Significance of research in LIS; Areas of research in Library and Information Science.

**Unit II**

Scientific method – Nature of research in library & information science.

**Unit III**

Research methods – Definitions – Sources – Advantages – Limitations historical method, case study method, survey method, experimental method and other methods (Field investigation Research, Evaluation research, Action research, Ex post Facto)

**BLOCK II: RESEARCH PROBLEMS & LITERATURE SEARCH**

**Unit IV**

Research Problem: Sources of research problem – Locating the problem – Formulation of the research problem – Criteria in selecting a problem – Defining and delimiting problems

**Unit V**

Literature search – Importance of surveying related literature – Library sources, research reviews, catalogue, indices, abstracts, bibliographies, microforms, computerized information retrieval systems.

**BLOCK III: RESEARCH PROBLEMS AND HYPOTHESIS**

**Unit VI**

Hypothesis – Meaning, Importance, types, sources, characteristics- Formulation of Hypothesis, Different forms of hypothesis – Difficulties in formulation – Testing the hypothesis.

**Unit VII**

Planning of research; Planning Process; Review of literature, Selection of a problem-problems, process of identification, criteria of selection, formulation of problem - Research design-Essentials of good research design & its importance, preparation of the research design/writing the research proposal

## **BLOCK IV: TYPES OF RESEARCH AND DATA COLLECTION METHODS**

### **Unit VIII**

Types: Descriptive, Diagnostic, Exploratory; and Experimental.

### **Unit IX**

Data collection, primary and secondary data, methods of data collection, Research Technique and Tools; Questionnaire, Schedule, Interview, Sampling, Scale and Check list, Library Records and Reports

### **Unit X**

questionnaire construction & design, types of questionnaire – secondary data sources and precautions in the use of secondary data

## **BLOCK V: STATISTICAL SOFTWARE & STYLE MANUAL**

### **Unit XI**

Data analysis, interpretation and presentation – Research reporting.

### **Unit XII**

Statistical analysis software SPSS, PSP and SOFA

### **Unit XIII**

Report Writing – Structure and Components – Style manuals – APA, MLA, Chicago. MS Word and Zotero;

### **Unit XIV**

Bibliometrics, Scientometrics, and Informetrics, Webometrics

## **SUGGESTED READINGS:**

1. Busha, C. Hand Harter, S.S. (1980). Research methods in librarianship: Techniques and interpretation. Orlando, Academic press.
2. Charles, H. et.al. (1993). Research methods in librarianship: Techniques and interpretations, New Delhi: Sage.
3. Fowler, F.J. (1993). Survey research methods. New Delhi: Sage.
4. Goode, W.J. and Hatt, P.K. (1986). Methods in social Science research. New Delhi: McGraw Hill.

5. KrishanKumar(1992). Research methods in Library and Information Science. New Delhi: Vikas
6. Krishnaswami, O.R. (1993). Methodology of Research in Social Sciences. Bombay:Himalaya.
7. Leddy, P. D. (1980).Practical research: Planning design. London: Clive-Bingley.
8. RavichandraRao, I.K. (1985). Quantitative methods for Library and Information Science. New Delhi: Wiley Eastern.
9. Slater, M. (1990). Research methods in Library and Information studies. London: L.A.
10. Stevens, R.E. Ed.(1971). Research methods in librarianship. London: Clive Bingley.

**Course Code : 32324**  
**Paper 8. INFORMATION PROCESSING & RETRIEVAL –**  
**PRACTICE**

**Practice**

1. Classification of Documents according to abridged English Edition of UDC and CC- 6<sup>th</sup> edition.
2. Cataloguing of books, Serials and Non - Book material according to AACR 2R and Sears List of Subject Headings.