

# SCHOOL OF LIBRARY AND INFORMATION SCIENCE

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

### SYLLABUS

#### MLS-01 : COMMUNICATION AND INFORMATION SYSTEMS

##### BLOCK - I

Basics of Information: Information – Concept, Notion and Definition-Information - Theories and Models-Information diffusion – Pattern; Information Transfer Cycle.

##### BLOCK - II

Communication Channels: Concept, Notion and Definition - Theories and Models -Modes of Communication - Forms and Channels- Barriers to Communication

##### BLOCK – III

Sources of Information: Information Sources – Characteristics; Types-Primary Sources – Characteristics; Types, Secondary Sources – Characteristics, Types - Tertiary Sources – Characteristics; Types- Non-Documentary Sources – Electronic Sources - Types .

##### BLOCK – IV

Information Systems, Centres and Services: Information Centres – Introduction, Meaning and Definition -Translation Centres and Reprographic Centres-Information System - Types and sub-systems – INIS, AGRIS, PubMed, NISCAIR, ICMR, LC and OCLC.

##### BLOCK – V

Information Institutions: Data Centres, Information Analysis Centres, Clearing House – Need; Genesis-Referral Centres - Objectives, Structure and Functions.

##### REFERENCE:

1. Feather J. (2008). *The Information Society: a study of continuity and change. Ed. 5.* London: Facet Publishing.
2. Khanna, J.K. (1984). *Fundamentals of Library Organization* . New Delhi : Ess Ess Publication.
3. Mistra, Jogesh (1979). *History of Libraries and in Librarianship in Modern India Since 1850.* Delhi: Alma Ramu & Sons.

#### MLS-02: INFORMATION PROCESSING AND RETRIEVAL (THEORY)

##### BLOCK – I

Information Retrieval: Information Retrieval – Meaning, Definition- Processes and Technique -

## **BLOCK – II**

Information Storage and Retrieval Systems: ISAR Systems - Objectives, Types and Compatibility - Intelligent IR Systems

## **BLOCK – III**

Bibliographic Description: Principles and Evaluation of Bibliographic Description - Rules for Bibliographic Description- Standards for Bibliographic Record Format – Metadata.

## **BLOCK – IV**

Indexing Languages and Systems: Intellectual Organization of Information - Indexing Languages - Concept and Types - Classification Systems – Types, Genesis and Development- Indexing Systems and Techniques –Evaluation of IR Systems.

## **BLOCK – V**

Content Development: Norms and Guidelines of Content Development -Web-based Content Development - Introduction to HTML and XML –Multilingual Content Development.

## **REFERENCE:**

1. Belew, Richard K. (2001). *Finding Out About: A Cognitive Perspective on Search Engine Technology and the WWW*. Cambridge, UK: Cambridge University Press.
2. Date, C.J. (2000). *An Introduction to Database Systems*. Reading, MA: Addison-Wesley.
3. Foskett, A. C. (1996). *Subject Approach to Information*. 5<sup>th</sup> ed. London: Library Association.
4. Foulonneu, M. (2008). *Metadata for Digital Resources*. UK: Chandos
5. Korfhage, Robert R. (1997). *Information Storage and Retrieval*. New York: Wiley.

## **MLS-03: INFORMATION PROCESSING AND RETRIEVAL (PRACTICE)**

### **BLOCK - I**

Classification of Documents according to the Third Abridged edition of Universal Decimal Classification [UDC] and Colon Classification [CC] Ed. 6.

### **BLOCK - II**

Bibliographic description for different types of Documents viz., books, periodicals, and non-book materials as per AACR-2 and Sears List of Subject Headings.

### **BLOCK - III**

Cataloging of Non-Book Materials: Cartographic Materials, Manuscripts (Including Manuscript Collection), Music, Sound Recording, Motion Picture and Video-Recording, Graphic materials, Machine Readable data Files, Three Dimensional Artifacts and Realia.

#### **REFERENCE:**

1. Anglo-American Cataloguing Rules 2<sup>nd</sup> ed, (1988). London: Library Association.
2. Carmen, Rovira & Reyes, Caroline, Reyes (ed). (1986). *Sear's List of Subject Headings, 13<sup>th</sup> ed.* New York: Wilson.
3. Chan, Lois Mai (1986). *Library of congress Subject Headings*, Littleton: Libraries Unlimited, 1986.
4. Graham, Paul (1985). Current developments in Audio visual cataloguing. *Library Trends*, Summer.p. 5- 66

### **MLS-04 : MANAGEMENT OF INFORMATION CENTRES**

#### **BLOCK - I**

Principles of Management: Management - Concept and Schools of Management Thought - Management - Functions- Total Quality Management - Change Management; Participative Management.

#### **BLOCK – II**

Systems Analysis and Control: Systems Approach - Work Flow and Organisation Routine - Monitoring and Control Techniques-Performance Measurement and Evaluation Techniques

#### **BLOCK – III**

Human Resource Management: Organizational Behaviour - Managerial Quality and Leadership - Human Resource Planning and Development.

#### **BLOCK – IV**

Financial Management: Budgeting and Types- Budgetary Control System - Costing Techniques and Cost Analysis

#### **BLOCK – V**

Marketing of Information Products and Services: Information as a Marketable Commodity - Marketing Mix - Approach and Techniques -Market segmentation - E-Marketing

#### **REFERENCE:**

1. Bryson, Jo (1990). *Effective Library Aand Information Centre Management*. Hants : Gower.

2. Clayton, P R & Gorman, G E (2006). *Managing Information Resources iIn Libraries: Collection Management iIn Theory aAnd Practice*. London : Facet Publishing, London.
3. Clayton, P. R.& Gorman, G. E. (2006). *Managing information resources in libraries: collection management in theory and practice*. London: Facet Publishing.

## **MLS-05 : RESEARCH METHODS**

### **BLOCK –I**

Elements of Research: Research - Definition, Characteristics - Types of Research - Historical, Fundamental / Pure, Applied, Scientific Method- Formulation of Research Problem; Sources of identification, Factors influencing in selection of research problem.  
- Hypothesis - Meaning, Definition, Types; Formulation and Testing.

### **BLOCK – II**

Research Methods and Techniques: Research Methods – Survey, Census, Case Study, Experimental, Focused groups.- Method of Data collection - Observation, Interview and Questionnaires - Advantages and Disadvantages-Sampling - Introduction; Definition of Universe, Population, Sample - Sampling Techniques – Probability and Non-Probability.

### **BLOCK – III**

Design of Research: Research Design - Definition and Importance – Types - Exploratory, Description, Experimental- Content Analysis – Socio-metric Techniques, Constructive Typology, Projective Techniques, Statistical Survey, Evaluation Studies.

### **BLOCK – IV**

Data Analysis: Problem Measurement – Reliability, Validity, Measures of Central Tendency – Average – Measures of Dispersion; Correlation Analysis – Regression Analysis – Time Series - Measurement of Trends -Testing of Hypothesis: Statistical Testing; Chi-square Test.

### **BLOCK – V**

Presentation of Research: Report Writing - Organization of Report – Components  
-Style and presentation – Tables, Charts, Figures

## **SUGGESTED READINGS**

1. Charles H. Busha, Charles H. & Stephen, P. Harter, Stephen, P. (1980). *Research Methods in Librarianship: Techniques and Interpretation*. New York: Academic Press
2. Goon, A M. (2000). *Fundamental of Statistics*. Calcutta: World Press
3. Krishnaswami, O.R. (1993). *Methodology of Research in Social Sciences*. Bombay : Himalaya

4. Das Gupta, Kalpana (ed)(2001). *Library practice for effective management*. New Delhi : Indian Library Association.
5. Evans, (G E &) And Saponaro, (M Z. (2005) ). *Developing Library Aand Information Center Collections. Ed. 5. 2005*. London : Libraries Unlimited.

## **MLS-06 : APPLICATIONS OF ICT**

### **BLOCK – I**

Overview of Computer Technology:Computer – Introduction, Classification, Genesis and development of computer technology, Computer Generations - Processor Technology - Storage Technology - Input, Output devices- Programming Languages - Natural Language Processing- Fundamentals of Telecommunication Technology

### **BLOCK – II**

Operating Systems and Programming Languages: Operating System – Introduction, Definition, Functions, Types – Windows; Unix – History, Version, Structure, commands- Use of Computers for House Keeping Operations -Automated Acquisition System; Automated Cataloguing System – Authority Control and standard formats in cataloging - Workflow in catalogues; Automated Serials Control System- Functions- Management and workflow in Serials Control System- Digital Libraries.

### **BLOCK - III**

Design and Management of Databases: Database - Introduction, Components, Structure, Organization and search - Database Models - Hierarchical Database, Relational Model, Network Model - Bibliographical Database; Database Management Software.

### **BLOCK - IV**

Networking and internet Services: Computer networks – Components, Types - LAN, MAN, WAN; Network Topology - Bus, Ring, Star, Mesh and Hierarchical Topology- Elements in Networking- Network based Information Services- Internet Services: Introduction – History of Internet – Hardware – Basic communication facilities: E-mail, FTP – TELNET – Network Navigation Tools: Archie, Gopher, Veronica – World Wide Web- Information Services – Web page Design – HTML – Internet based Library and Information Services: E-books, E-Journals – Institutional Repositories (IR) - Advantageous and Disadvantageous.

### **BLOCK –V**

**Computerized Information Services:**House-keeping operations- Current Awareness Service and Selective Dissemination of Service – Alerting services – Digital Reference Service – Bibliographic Services – Electronic Document Delivery – Inter Library Loan.

### **REFERENCE:**

1. Andrews, J. (2010). *Digital Libraries*. London: Ashgate
2. Cox, Andrew (2010). *Introduction to Digital Library Management*. London: Facet Publishing.
3. Deepali , Talagala (2003). *Web Interface For CDS/ISIS : Genesisweb V.3.0*. Colombo: Sri Lanka Library Association.
4. Haravu, L J. (2004). *Library Automation: Design, Principles aAnd Practice*. New Delhi :. 2004.

## **MLS-07: ACADEMIC LIBRARY SYSTEM**

### **BLOCK – I**

Introduction: Academic Libraries - Objectives, Types and Functions-Role of UGC and other bodies in promoting libraries of universities, Colleges and Other Institutions of Higher Learning- Library Governance-Academic Library Services- Financial Management in Academic Libraries.

### **BLOCK – II**

Collection Development: Collection development Policy; Weeding Out Policy -Problems in Collection Organization- Collection development Programmes

### **BLOCK – III**

Staffing Pattern and Staff Development: Categories of Staff - Professional – Para-professional, Semi-professional - Norms and Patterns- Continuing Education Programmes and Personnel Management.

### **BLOCK – IV**

Resource Sharing Programme: Resource Sharing - Need, Objectives and Function - INFLIBNET - Activities and Services in resource sharing.

### **BLOCK – V**

Promotional Services:User Education – Information need analysis -Information Literacy – Methods - Use and User Studies

### **REFERENCE:**

1. Baker, David (Ed.) (1997). *Resource Management in Academic Libraries*. London : Library Associations.
2. Brophy, Peter (2000). *The Academic Library*. London : Library Association.
3. Budd, J. M. (1988). *The Academic Library: The Context, its Purpose and its Operation*. London : Libraries Unlimited.
4. Chapman, Liz (2001). *Managing Acquisitions in Library and Information Services*. London : Library Association.
5. Dowler, L. (Ed.) (1998). *Gateways to Knowledge: The Role of Academic Libraries in Teaching, Learning and Research*. London : MIT Press.

## **MLS-08: INFORMETRICS**

### **BLOCK – I**

Evolution: Informetrics - genesis, scope and definition- Other metrics - Librametry, Bibliometrics, Scientometrics & webometrics

### **BLOCK – II**

Laws of Bibliometrics: Classical bibliometrics laws – Zip’s Law, Lotka’s Law, Bradford’s Law Of Scattering; Generalized Bibliometrics distributions. Fitting of Informetrics models : Bradford’s Curve, Leimukuhler’s Distribution, etc.-Concentration measures; 80-20 rule, Price’s Law relating to scientific productivity; Analysis of use statistics.

### **BLOCK – III**

Growth Studies: Growth and Obsolescence of literature-Variou growth models; Aging factor and half-life: real vs. apparent; synchronous vs. diachronous.

### **BLOCK - IV**

Citation Analysis: Citation analysis- Bibliographic Coupling and Co-Citation Analysis

### **BLOCK – V**

Quantitative and Qualitative Indicators: Quantitative Indicators: Authorship pattern, Collaborative Index, Affinity Index, Science Production Index- Qualitative Indicators - Impact factor, h-index, g-index, i-10; Mapping of Science.

### **REFERENCE:**

1. Baker, S L. & Lancaster, S.W. (1991). *Measurement and evaluation of library services. 2 Ed.* Arlington: Information Resources Press,
2. Carpenter, R.L. & Vasu, E.S. (1979). *Statistical methods for librarian.* Chicago: ALA.
3. Donohue, J C. (1990). *Understanding scientific literature: A Bibliometric approach.* London: MIT.
4. Egghe, L., & Rousseau, R. (1990). *Introduction to Informetrics: Quantitative methods in Library, Documentation and Information Science.* Amsterdam: Elsevier.
5. Egghe, L. & Rousseau, R. (2001). *Elementary statistics for effective Library and Information services management.* London: ASLIB.





