M.Lib.I.Sc (One -Year Programme) Department of Library and Information Science, UCA&SS, OU RESTRUCTURED CHOICE BASED CREDIT SYSTEM – SCHEME OF THE EXAMINATION (FROM THE ACADEMIC YEAR 2018-19)

I Semester

Sl.	Course	Course Name	Course Type	Instruction hrs/week	Duration of Exam	Max. Marks		Total	Credits
No.	Code					Internal Assessment	Semester Exam	Marks	
1	MLS- 101	Information and Communication	CC	5	3	20	80	100	5
2	MLS-102	Information Retrieval Systems (Theory)	CC	5	3	20	80	100	5
3	MLS-103	Research Methods for Library and Information Science	CC	5	3	20	80	100	5
4	MLS -151	Elective A.Information Technology (IT) B. College and University Libraries	DSE	4	3	20	80	100	4
5	MLS -152	Elective A. Basics of Computer Software (Practice) B. Metadata (Practice) C. Information Sources (ID)	SEC	4	3	-	100	100	4
		Tutorials		2			25	25	1
	TOTAL			25		80	445	525	24

M.Lib.I.Sc (One-Year Programme) Department of Library and Information Science, UCA&SS, OU

RESTRUCTURED CHOICE BASED CREDIT SYSTEM - SCHEME OF THE EXAMINATION

(FROM THE ACADEMIC YEAR 2018-19)

II- Semester

Sl. No.	Course Code	Course Name	Course Type	Instruction hrs/week	Duration of Exam	Max. Marks		Total	Credits
						Internal Assessment	Semester Exam	Marks	
1	MLS-201	Management of Library and Information Centers	CC	5	3	20	80	100	5
2	MLS-202	Library Automation and Networking	CC	5	3	20	80	100	5
3									
	MLS-203	Software for Library Automation	CC	5	3	-	100	100	5
4	MLS-251	Elective A. Information Systems and Programmes B. Research and Technical Libraries	DSE	4	3	20	80	100	4
5	MLS-252	Elective A. Digital Libraries B. Information Literacy C. Project	SEC	4	3	20	80	100	4
		Tutorials: Seminar/Field Visits/Group Discussions		2			25	25	1
	TOTAL			25		80	445	525	24

Project Oriented Dissertation : In lieu of One Theory / Practice Paper (i.e. 4 Credits)

Note: Software for Library Automation is a practice paper which comprises of Part A: 40 marks theory and Part B: 60 Marks practice total 100 marks.

M.Lib.I.Sc (One-Year Programme) Department of Library and Information Science Osmania University, UCA&SS,O.U

SEMESTER SYSTEM

(RESTRUCTURED CHOICE BASED CREDIT SYSTEM – SYLLABUS AND SCHEME OF THE EXAMINATION)



(FROM THE ACADEMIC YEAR 2017-2018)

Internship: The Student has to undergo One month compulsory Internship in a recognized Library / Information Centre. The Internship has to be completed within three months from the last examination of the 2^{nd} Semester. The Grading of A, B, C and D (A = Excellent, B = Good, C = Satisfactory and D = Not Satisfactory) will be awarded by the concerned Head of the Library / Information Centre based on the candidate's performance. This grading will be mentioned in the Memo of Marks. However, it will not be considered for the award of Division / percentage of Marks.

(FIRST SEMESTER)

PAPER-MLS 101: INFORMATION AND COMMUNICATION (CC)

<u>Unit-1: Nature of Information:</u>

- o Data, Information & Knowledge: Definition, scope, use.
- o Information : Nature, Types, Characteristics, Properties, Use and Value.
- o Information and Social Change.
- o Information Explosion.
- o Information Society: Genesis, Characteristics, Implications.
- o Information Science: Definition, Scope and linkages with other disciplines / Subjects.
- o Information Industry.

Unit-2: Information Communication:

- o Information Cycle: Information Generation, Collection, Storage, Forms, Transfer and Dissemination of Information.
- o Communication : Definition, Concept, Types, Communication Models (Theories). Shannon Theory; Lasswell's Theory; Gerbner's Theory, Schramm Theory. Communication Media.
- o Scientific Communication.
- Formal and Informal Channels of Communication. Information Intermediaries: Invisible Colleges, Information Exchange Groups, Technological Gate-keepers, Information Brokers / Consultants.
- o Barriers of Communication of Information.
- o Information Literacy
- o Information Filtering

Unit-3: Economics of Information:

- o Information needs. Information Seeking Behaviour: Concept, methods, need and purpose.
- o User Studies: Concept, purpose, methods, its application in libraries.
- o Information as Commodity and Resource.
- o Information Production and distribution.
- Marketing of Information : Market Analysis, Market Segmentation, Marketing Mix, Marketing Audit.
- o Intellectual Property Rights (IPR). Copyright. Right to Information. Censorship.

<u>Unit-4: Knowledge Management & Digital Library:</u>

- o Knowledge Management. Definition, Characteristics. Principles, Functions, Activities.
- o Document Management : Concept. Document Management vs Knowledge Management. Management of Electronic Resources.
- o Content Management.
- o Digital Library: Concept, use, advantages, design and development.
- Digital libraries Institutional Repositories Need, purpose, material to be included and limitations.

- o Virtual Library : Concept.
- o Virtual Learning Online learning, interactive techniques.
- o e-learning.

<u>Unit-5: Informetrics:</u>

- o Citation: Citation Analysis, Bibliographic Coupling.
- o Librametry, Bibliometrics and Scientometrics, Webometrics: Concept, Scope, Usefulness.
- o Bibliometric Laws Bradford, Lotka and Zipf.

- 1. Narayana, G.J. Library & information management. New Delhi, Prentice-Hall of India, 1991.
- 2. Kumar, P.S.G.: Fundamentals of Information Science, New Delhi, S. Chand & Co. Ltd., 1998.
- 3. Kumar, P.S.G.: <u>A Students Manual of library and Information Science</u> (two volumes Bound in one). Delhi, B. R. Pub. Corporation, 2002.
- 4. Prasad, H. N. *Information needs and users*. Varanasi: Indian Bibliographic Centre, 1992.
- 5. Prasher, R. G. *Information and its Communication*. New Delhi : Medallion Press, 1991.
- 6. Singhal, Aravind and Rogers, EM. *India's information revolution*. New Delhi: Sage, 1989.
- 7. Cawkell, A.E., Ed. *Evolution of an Information Society*. London: ASLIB, 1987.
- 8. Harris, S. *Human Communication*. New Delhi : BPB Publications, 1992.
- 9. Atherton, Pauline. Handbook for information systems and service, Paris: Unesco, 1977.
- 10. Garvey, William D. <u>Communication: the essence of science facilitating information exchange among libraries, scientists, engineers and students</u>. Oxford: Pergamon Press, 1979.
- 11. McGarry, K.J. *The changing context of information: an introductory analysis*. London: Bingley, 1981.
- 12. Machlup, F. & Mansfield, Uma, eds. *The study of information: Interdisciplinary messages.* New York: Wiley, 1983.
- 13. Meadows, A. J. *Communication in science*. London: Butterworths.
- 14. Cronin, Blaise, ed. *The marketing of library and information services*. (Aslib Reader, Vol.4). London: Aslib, 1981.
- 15. Galatin, Malcolm & Laiter, Robert D, eds. Economics of Information. London: Nijhoff, 1981.
- 16. Roberts, Stephen A. Ed. *Costing and the economics of library and information services*. London: Aslib, 1984.
- 17. Chorafas, D. N. Knowledge revolution. 1968.
- 18. Garvey, W. D. *Communication, the essence of science*. 1978.
- 19. McGarry, K. J. *Communication, knowledge and the information*. 1975.
- 20. Machlup, F. *Knowledge: its creation, distribution and economic significance*. VI, 1980, V2, 1982; V3. 1984.
- 21. Masuda, Y. *The information society.* 1980.
- 22. Rozsa, G. Scientific information and society. 1973.
- 23. Wolpert, S.A., Wolpert, J. F. Economics of information. 1986.

- 24. Crawford, Marshall Jean. *Information broking: a new career in information work.* London: LA. 1988.
- 25. Gurnsey, John and White, Martin. Information consultancy. London: Clive Bingley, 1989.
- 26. Graham P. Cornish: <u>Copyright: Interpreting the law for libraries, archives and information services</u>. Rev. 3rd ed. London: Facet Publishing, 2001.
- 27. Sandy Norman (Ed): <u>Copyright in Further and Higher Education Libraries</u>. 4th Edn. London: Facet Publishing 1999.
- 28. Rowley, J. E.: <u>The Electronic Library</u>. 4th Edn of Computers for Libraries. London: Facet Publishing, 1998.
- 29. John Feather: *The Information Society: A study of continuity and change*. 3rd Edn. London: Concept Publishing, 2000.
- 30. James Dearnley and John Feather: <u>The Wired World: An introduction to the theory and practice of the information society</u>. London: Facet Publishing, 2001.
- 31. Angela Abell and Nigel Oxbrow. <u>Competing with knowledge: The information professional in the knowledge management age</u>. London: Facet Publishing, 2001.
- 32. Eileen Elliott de Saez. *Marketing concepts for libraries and information services*. 2nd Edn. London: Facet Publishing, 2002.
- 33. Barbara Allan. <u>E-learning and Teaching in library and Information Services</u>. London: Facet Publishing, 2002.
- 34. Malwad,NM and others. Digital Libraries: Dynamic store house of digitized information. New Delhi: New Age, 1996.
- 35. Leona Carpenter, Simon Shaw & Andrew Prescott. <u>Towards the Digital Library.</u> London: LA, 1998.
- 36. Peter Brophy. <u>The Library in the 21st Century: New Services for Information Age</u>. London: LA, 2001.
- 37. Susan Hornby & Zoe Clarke (Ed). <u>Challenge and change in the Information Society</u>. London: Facet Publishing, 2002.
- 38. Joan Feather. Communicating knowledge. London: Facet Publishing, 2002.
- 39. G. G. Chowdhury. *Introduction to Digital Libraries*. London: Facet Publishing, 2003.
- 40. Eileen Elliott De Saez. <u>Marketing Concepts for Libraries and Information Services.</u> London: Facet Publishing, 2002.
- 41. W. R. Bikowitz. Knowledge Management. Delhi : PHI, 2000.

PAPER-MLS 102: INFORMATION RETRIEVAL SYSTEMS (THEORY) (CC)

Unit-1:

<u>Information Storage and Retrieval (IR) Systems:</u>

Concept, components, IR tools.

Information Analysis, repackaging and consolidation : Concept, purpose. Content Creation / Content Development.

Indexing:

Concept. Principles / general theory of indexing.

Content Analysis: Meaning, Purpose. Application in LICs.

Unit-2:

Indexing Languages, types, Characteristics.

Vocabulary control – natural and controlled languages. Semantics and Syntax.

Library Classification Schemes: UDC and CC.

Thesaurus – Structure and functions. Design / Construction of Thesaurus.

Subject Headings – LCSH and SLSH – Structure and Functions.

Unit-3:

Indexing Techniques:

Syntactical problems. Pre and post-coordinate indexing.

Chain Indexing, PRECIS. Uniterm, Keyword and Citation Indexing.

Computer based indexing systems and methods (Automatic Indexing).

Unit-4:

Bibliographic Description:

Standards for bibliographic Description: ISBDs, MARC, CCF and MARC 21. EAD (Encoded Archival Dscription).

METADATA: Concept, Formats – Features of MARC, IAFA, Templates, Dublin Core, TELURC, FGDC --- Detailed Study of any two formats. Protocols – Features – SODA, SMARTS. Metadata vis-à-vis Internet.

Data Mining, Data Warehousing.

DIGITAL OBJECT IDENTIFIER (DOI): Concept, Origin, application, principles for issuance of DOI. Principles for the application of DOI. DOI Foundation, procedure for registration.

<u> Unit-5:</u>

<u>Information Retrieval:</u>

Retrieval methods – manual and automated. Search processes, and strategies. Boolean Logic. Preparation of query, steps in search strategy. Search tools – search engines, meta-search engines. Subject directories, subject guides, specialized data bases, etc.,. Criteria for evaluation of IR Systems.

<u>Computerized Information Services:</u> Machine Translation. Automatic Indexing. Computerized Abstracting. Natural Language Processing.

- 1. Unesco. CCF. Paris: Unesco. 1988.
- 2. Jean Atchison & Alan Gilchrist. <u>Thesaurus construction: a practical manual</u>. London: Aslib. 1972.
- 3. A. C. Foskett. *The subject approach to information*. 4th ed. London: Bingley, 1982.
- 4. F. Wilfrid Lancaster. <u>Information retrieval systems: Characteristics, testing and evaluation</u>. 2nd ed. New York: Wiley, 1979.
- 5. F. W. Lancaster & L. C. Smith. *Compatibility issues affecting information systems and services.* Paris: Unesco,1983.
- 6. Jennifer E. Rowledy. <u>Organising knowledge: an introduction to information retrieval</u>. Aldorshot: Gower, 1987.
- 7. P. Simmons & A. Hopkins. CCF: The Common communication format. Paris: Unesco, 1984.
- 8. C. J. Van Rijsbergen. *Information retrieval*. 2nd ed. London: Butterworths, 1970.
- 9. B. C. Vickery. <u>Techniques of information retrieval</u>. London: Butterworths, 1970.
- 10. Atchison, J. Gilchrist, A: *Thesaurus construction, a practical manual*. 1972.
- 11. Austin, D. Precis, *A manual of concept analysis and subject indexing*. 2nd ed. 1984.
- 12. British Standards Institutions: BS 1000M: 1993, Universal Decimal Classification IME, 1993.
- 13. Chernyi, A. I. *Introduction to information retrieval theory*. 1973.
- 14. Cleaveland, D. B., Cleveland, A. D. Introduction to Indexing and Abstracting. 1983.
- 15. Gostello, J. C. *Coordinate indexing.* 1966.
- 16. Dym, E. D. Subject and information analysts. 1985.
- 17. Kochen, M. (Ed). Principles of information retrieval. 1974.
- 18. Lancaster, F. W. Information retrieval systems, characteristics, testing and evaluation. 1968.
- 19. Lancaster, F.W. *Indexing and Abstracting in Theory and Practice*. London: Facet Publishing, 2003.
- 20. G. G. Chowdhruy. *Introduction to Modern Information Retrieval*. 2nd edn. London, Facet Publishing, 2003.
- 21. Alex Berson, Stephen Smith & Kurt Thearling. <u>Building data mining applications for CRM.</u> New Delhi: TMH, 2000.
- 22. G. E. Gorman, (Ed). <u>Metadata applications for Management</u>. London: Facet Publishing, 2003.
- 23. Mary A. Burke. <u>Organization of multi-media Resources: Principles and Practices of Information Retrieval.</u> Alder Shot: Gower, 1999.

PAPER-MLS 103: RESEARCH METHODS FOR LIBRARY AND INFORMATION SCIENCE (CC)

Unit-1:

Research:

Definition, need and purpose. Basic Concepts: Validity, reliability, Objectivity, Subjectivity. Variables: Dependent, Independent and Intervening, Logic: Induction and Deduction. Intuition.

Types – Basic and applied. Interdisciplinary & multidisciplinary, Team / Group Research, Relay Research. Scientific method. LIS Research in India.

Unit-2:

Research Design:

Aims and objectives. Scope and limitations. Problem identification, formulation and statement of the problem.

Hypothesis:

Definition, meaning, formulation. Types: Descriptive, relational and explanatory, Null-Hypothesis. Verification.

Unit-3:

Methods of Research:

Survey, descriptive, comparative, historical, experimental, case study and Delphi technique.

Unit-4:

Methods of data collection:

Types of data – Primary and Secondary.

Data Collection Methods: Primary data – Questionnaire, Interview and Observation.

Scales and Check Lists.

Secondary data – Historical / recorded.

Sampling methods and techniques:

Probability sample: Simple Random sampling, systematic, stratified. Non-probability sample: Quota, Accidental, purposive, incomplete. Cluster and multi-state sampling. Sample size, bias, error.

Unit-5:

Methods and Tools of Data Analysis:

Problem measure, reliability, validity, Descriptive Statistics – Measures of Central Tendency : Mean, Median, Mode. Measure of Central distendency : Standard Deviation. Graphical Presentation of data : Bar diagrams, Pie-chart, Line Graphics, Histograms, Inferential Statistics : Measure of Association : Co-efficient of Correlation.

Testing of Hypothesis : Chi-square test & T-test.

Software for Statistical Analysis – SPSS – Features.

Writing research report:

Structure & Contents of report, presentation of findings. Style Sheets, Citation of Print, Electronic and Internet sources.

Select Readings:

- 1. Charles H. Busha & Stephen, P. Harter. <u>Research Methods in Librarianship: Techniques and Interpretation</u>. New York: Academic Press, 1980.
- 2. Marurice, B. Line. <u>Library surveys: an introduction to the use, planning procedure and presentation of surveys</u>. 2nd ed. London: Bingley, 1982.
- 3. Nick Moore & Martin Hesp. *The basics of writing reports etcetera*. London: Bingley, 1985.
- 4. Goode (William J) and Hatt (Paul K). <u>Methods in Social Research</u>. New York: McGraw-Hill Book Company, INC. 1952.
- 5. Gopal (M.H.): *An Introduction to Research Procedure in Social Sciences*. New Delhi, Vikas, Pub. House, 1992.
- Simpson, J. L. <u>Basic Research Methods in Social Sciences</u>. The Art of empirical investigation. 1969
- 7. Stevens Rolland E. *Research Methods in Librarianship*. London, Bingley, 1971.
- 8. Powell, Ronad, R. Basic research methods for librarians. Norwood: Ablex, 1985.
- 9. Krishnaswami, O.R. Methodology of Research in Social Sciences. Bombay: Himalaya,1993.
- 10. Ravichander Rao, I.K. *Quantitative Methods for Library and Information Science.* New Delhi : Wiley Eastern, 1983.
- 11. Mary Lee, Bundi. *Reader in Research Methods for Librarianship.* --: Greenwood Press.

PAPER- MLS 104 (A): INFORMATION TECHNOLOGY (IT) (DSE)

<u>Unit-1</u>:

<u>Information Technology:</u>

- o Concept, definition and components of IT
- o Client -- Server Technology : Concept, Use. Different types of Servers File Server, Proxy Servers, Web Servers, Print Server, Database Server, etc.
- Strategic Management of Technology
- o Trends in Hardware and Software Developments.
- Software Open Source and Proprietary Implications, Advantages of using different types of Software.

Unit-2:

Communication Technology:

- o Telecommunications Signals: Analog and Digital. Modem types, use.
- Switching Systems: Concept, Purpose, Types -- Circular, Message and PSS. Gateways, Ethernet, Hub/Switches.
- o Communication Media Twisted Pair, Coaxial, Optic Fibres, Satellite Communication, VSAT, Microwave. Bandwidth, Multiplexing. ISDN.
- o Data Communication Concepts Parallel & Serial; Synchrnous & Asynchrnous; Simplex, Half Duplex and Full Duplex.

Unit-3:

Electronic Information:

- o Electronic / Digital Information.
- o Digital Collection, Digital Rights Management.
- Digitization Concept, Procedures and Problems. Input devices OCR, Scanners, Cameras.
 Software & hardware used for digitization. Image Formats (JPEG, GIF / BMP). Audio Formats (MPEG, MP3, WAV). Image Editing.
- o e-documents: Concept of e-books and e-journals. Trends in Production and availability of e-documents. Impact on Libraries and Information Centres and Users.
- o Preservation and archiving of e-resources.
- o Web logs. Identification and creation of Blogs. Wikies, Wikipedia.

Unit-4

Communication Tools and Techniques: An overview:

- o Fax, E-mail, Tele Tex, Videotext, Tele Conferencing, Video Conferencing, Voice Mail. Hyper Text and Hyper Media. List Serve / Electronic groups.
- Wireless Communication: Concept Networking, WAP / Wireless Internet, WLL, Cellular Communication.

Internet Communication and Expert Systems.

- o Internet Communication : Internet as a communication tool. Facilities for communication. Features and Developments.
- o Internet Connectivity Dial up, leased, microwave, cable modem, ISDN, Digital Subscriber Lines (DSL). Other related issues.
- o Data Security: Concept, need, purpose. Virus Definition, effect. Security Methods, Firewall, Anti-virus software. SPAM. IDS (Intrusion Detection System).

- 1. Dowlin, K. *The electronic library*. New York: Neal Schuman, 1984.
- 2. Forester, T., Ed. *The information technology revolution*. Oxford: Blackwell, 1985.
- 3. Kelleher, Kathleen & Cross, Thomas B. <u>Teleconferencing: Linking propel together</u> electronically. Englewood Cliffs: Printice-Hall, 1985.
- 4. King, Donald W., ed. <u>Telecommunications and libraries: a primer jfor libraries and information managers</u>. White Plains: Knowledge Industryu, 1981.
- 5. Vervest, Peter. Electronic mail and message handling. London: Printer, 1985.
- 6. Zorkoczy, Peter and Heap, Nicholas. <u>Information technology: an introduction.</u> 4th ed. London: Pitman, 1995.
- 7. The Hindu speaks on information technology. Madras: Kasturi & Sons, 1993.
- 8. <u>Goucher, Phil. <u>Communications and Networks</u>. 2nd ed. New Delhi: Affiliated East-West, 1995.</u>
- 9. Rich, Elaine and Knight, Kevin. <u>Artificial Intelligence</u>. 2nd ed. New Delhi: TMH, 1994.
- 10. Kaul, H. K. *Information Networks: An Indian experience*. New Delhi : Virgo, 1992.
- 11. Chadha, R. K. and Gupta, S. R. Eds. Information Technology. New Delhi: Sarita, 1995.
- 12. Black, U. Emerging communication technologies. New Delhi: PHI, 1994.
- 13. Jeffcote, J. Multimedia in practice. New Delhi: PHI, 1994.
- 14. Ford, Nigel. *Expert Systems and artificial intelligence : An information manager's guide*. London : LA, 1991.

- 15. Alberico, Ralph and Micco Mary. *Expert Systems for reference and information retrieval*. West port: Meckler, 1990.
- 16. Bandhyopadhyay, S. *Information Technology for growth and prosperity*. New Delhi : TMH, 1994.
- 17. Vishwanathan, T. *Communication Technology*. New Delhi : TMH, 1995.
- 18. Kennedy, George. *Electronic communication systems*, 3rd ed. New Delhi : TMH,1991.
- 19. Sinclair, Ian R. Multimedia on PC. New Delhi: BPB,1995.
- 20. Botto, Francis. <u>Multimedia, CD-ROM & compact disc : a guide for users and developers</u>. New Delhi : Galgotia, 1993.
- 21. Rastogi, P. N. Knowledge engineering and expert systems. New Delhi : BPB, 1994.
- 22. Basandra Suresh, K. *Computers today*. New Delhi : Galgotia, 2002.
- 23. Harries, Steve. <u>Networking and telecommunications for information systems: an introduction to information networking</u>. London: LA, 1993.
- 24. Stuart D. Lee. *Digital Imaging: A practical handbook*. London: Facet Publishing, 2000.
- 25. Williams, Briank; Sawyer, Stacey and Hutchinson, Sarah E. <u>Using Information Technology: A practical Introduction to computers and Communication</u>. New Delhi: TMH, (latest edition)
- 26. Curtin, Dennis P. & others. *Information Technology: The breaking wave*. New Delhi : TMH, Latest Edition.
- 27. Leon, Alexis & Leon, Mathews. *Fundamentals of Information Technology*. Chennai : Leon Tech World, Latest Edition.
- 28. Radhakrishna P. Computers and Information Technology. Hyderabad: Hitech, Latest Edition.
- 29. Phil Bradley. The Advance Internet Searcher's Handbook. 2nd Edn. London: LA, 2002.
- 30. Ray Horak. *Communication Systems and Networks.* 2nd Ed. New Delhi : IDG, 2000.
- 31. Peter Jackson. *Introduction to Expert System*. Horlow: Addison Wesley, 2000.
- 32. Nils J. Nilsson. Artificial Intelligence: A New Synthesis. Singapore. Harcourt, 2000.
- 33. Internet Complete, 2nd Ed. New Delhi: BPB, 2000.
- 34. H.M. Deitel, P. J. Deitel and T. R. Deitel. *Internet and World Wide Web: How to Programme*. Delhi: Addison Wesley, 2001.
- 35. *Digital Library Tool Kit*. 3rd Ed. Santa Clara: Sun Micro Systems, 2003.
- 36. Digital Library Technology Trends. Santa Clara: Sun Micro Systems, 2002.
- 37. Alison Cooke. *A Guide to finding Quality Information in the Internet*. 2nd Ed. London: Facet, 2001.
- 38. Marlyn Deegan & Simon Tanner. <u>Digital Futures: Strategies for the Information Age</u>., London : Facet, 2001.

- 39. Phil Bradley. *Getting and staying noticed on the Web*. London: Facet, 2002.
- 40. R. David Lankes & Others (Eds): *Implementing Digital Reference Services : Setting Standards and making it real.* London : Facet, 2002.
- 41. G. E. Gorman (Ed). *The Digital Factor in Information & Library Services*. London: Facet, 2002.

PAPER-MLS 104 (B): COLLEGE AND UNIVERSITY LIBRARIES (DSE)

Unit-1:

College Libraries: Definition, Objectives, Functions and Services. Organization and Management of College Libraries. Different Sections and their functions. Evaluation of services. HR Planning and Development. College Library Collection.

<u>Unit-2:</u>

University Libraries: Definition, Objectives, Functions and Services. Organization and Management of College Libraries. Different Sections and their functions. Evaluation of services. HR Planning and Development. Staff Formula. Standards for Academic Libraries. University Library Collection.

Unit-3:

Collection Development. Book Selection Principles and Procedures. Book Selection tools. University Library Committees. Reference Collection. Indexing and Abstracting Services. Bibliographic and Full-Text databases.

Extension services and Public relations in college and University Libraries. Inter-Library Loan Services.

Unit-4:

UGC and Academic Libraries in India. Commissions and Committees on Academic Libraries. INFLIBNET, UGC-INFONET. ERNET, OCLC. Consortia for Academic Libraries.

Planning and developing – Building, Collection, infrastructure, services of College and University Libraries. Collection evaluation. IPR issues. Citation analysis. Impact factor, H-Index, Altmerix.

Development of College and University Libraries in India.

PAPER-MLS 352: Information sources (ID) (GE)*

Unit-1:

Information: Definition, need, types, cycle/flow

KINDS OF REFERENCE AND INFORMATION SOURCES; Information Sources – Documentary & Non-Documentary, Primary, Secondary and Tertiary Sources. Evaluation of reference sources. Searching Information from different Reference Tools / Sources – Strategies.

Unit-2:

REFERENCE SOURCES IN THE FIELDS OF SOCIAL SCIENCES:

Dictionaries, Encyclopedias, Almanacs, Year Books, Directories, Handbooks, Manuals, News-Summaries.

Concordances, Biographical, Geographical Information Sources, Electronic Resources with particular reference to Open Access sources.

Unit-3:

BIBLIOGRAPHY:

Meaning, scope, functions.

Kinds: Enumerative / Systematic, Analytical, Historical, Textual, and Descriptive.

Types: Retrospective and Current. General, Special, National (INB and BNB), Trade, subject. Preparation of bibliographies. Documentation list. BIBLIOGRAPHIC CONTROL -- Meaning, purpose, UBC and UAP.

Unit-4:

ABSTRACTING SERVICES:

Abstract : Meaning, use. Types : Indicative and informative. Parts of an Abstract.

Abstracting Services / Products. – Examples from different subjects.

INDEXING SERVICES

Index: Meaning, use. Indexing Services / Products – Examples from Different Subjects -- Citation Indexes. Citation of Documents – Purpose.

- 1. Katz, A: Introduction to Reference Work. 2V. 6th Ed. New York: McGraw Hill. 1992.
- 2. Guha, B. *Documentation & Information*. 2nd Ed. Calcutta: World Press, 1983.
- 3. Shera, JH and Egan, ME. *Bibliographic organization*, Chicago.
- 4. Girija Kumar and Krishan Kumar. Bibliography. New Delhi: Vikas. 1993.
- 5. Krishan Kumar, Reference service, New Delhi : Vikas. 2007.
- 6. A. C. Foskett. *The subject approach to information*. 4th ed. London : Bingley, 1982.
- F. Wilfrid Lancaster. <u>Information retrieval systems: Characteristics, testing and evaluation</u>. 2nd ed. New York: Wiley, 1979.
- Jennifer E. Rowledy. <u>Organising knowledge: an introduction to information retrieval</u>.
 Aldorshot: Gower, 1987.

- 9. C. J. Van Rijsbergen. *Information retrieval*. 2nd ed. London: Butterworths, 1970.
- 10. B. C. Vickery. *Techniques of information retrieval*. London: Butterworths, 1970.
- 11. Chernyi, A. I. *Introduction to information retrieval theory*. 1973.
- 12. Kochen, M. (Ed). Principles of information retrieval. 1974.
- Lancaster, F. W. <u>Information retrieval systems, characteristics, testing and evaluation.</u>
 1968.
- Offered for students of other Departments.

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PAPER—MLS 151 (A): COMPUTER SOFTWARE (Practice) (SEC)
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Unit-1:

Operating System – Windows / LINUX (Hands on experience with one Operating System)

Unit-2:

MS-Word, MS-Excel, MS-Power Point (Hands on experience in document creation, editing, printing, etc.)

Unit-3:

HTML, and XML

Developing a HTML Document

Unit-4:

Searching Information on any of the subjects: Science, Social Sciences, Medical, Engineering, etc.

PAPER—MLS 151 (B): METADATA (Practice) (SEC)

Unit-1: Metadata Initiatives. Dublin Core Elements.

Unit-2: Identification and creating Metadata of different documents

Unit-3: OAI/PMH (Hands on experience)

Unit-4: Metadata Standards (MODS and METS)

(SECOND SEMESTER)

PAPER-MLS 201: MANAGEMENT OF LIBRARY AND INFORMATION CENTRES (CC)

<u>Unit-1:</u>

<u>Management</u>: Concept, definition, nature and purpose. Schools of management. Management Styles.

<u>Planning Library and Information Centres</u>: Need and purpose, planning process, procedures,

steps and factors.

SWOT Analysis: Concept, Use. Role of Effective Communication on Management.

Unit-2:

<u>Systems Theory:</u> Concept, Components analysis, evaluation and design. Library as a System, Subsystems of a Library.

Performance Evaluation of Library and Information Centres.

Management Information Systems (MIS): Concept, Use.

Project Management : Definition, Objectives, Scope, Organisational Planning, Stages.

Unit-3:

Work Studies: Flow chart and Gantt Charts. PERT / CPM.

Work environment – Internal and External.

Management by Objectives: (MbO): Concept and relevance to LICs.

Decision making:

Concept, problems, aids. Decision Process.

Delegation of Authority:

Authority, Responsibility and Accountability – Concept, guidelines and barriers.

Unit-4:

Human Resource Management:

H R Planning, staffing, job analysis, job description, job evaluation, staff recruitment; selection, training and development. Inter personal relations.

Work relationships: Supervision, Control, Leadership, , Group Dynamics and Performance Evaluation.

Motivation: Concept, Theories.

Management of Change : Concept, need for change, Impact, Strategies, Organistion Culture, Promoting Change.

Use of Information Technology for Effective Management.

Unit-5:

Financial Management:

Resource Mobilisation.

Budgeting Methods: PPBS and Zero-based. Budgetary Control.

Cost Effectiveness and Cost Benefit Analysis.

Cost Accounting: Concept and Use.

Outsourcing.

Quality Management:

Quality: Concept, application in LICs. Quality Management, Quality Audit, Customer Satisfaction Vs Quality Management. Norms / guidelines. ISO-9000.

TQM : Definition, Scope, Purpose. Application in Libraries.

- 1. John Cowley, <u>Personnel management in libraries</u>. London: Bingley, 1982.
- 2. Blaise Cronin, ed. *Information management; from strategies to action*. London. Aslib, 1985.
- G. Edwaqrd Evans. <u>Management techniques for librarians</u>. 2nd ed. New York: Academic Press, 1983.
- 4. Noragh Jones & Peter Jordan. *Staff management in library and information work.* Aldershot: Gower, 1982.
- 5. Donald W. King, ed. *Key papers in the design and evaluation of information systems*. White Plains: Knowledge industry, 1978.
- 6. Donald Mason. *Information management*. Stevenage: Peregrinus, 1978.
- 7. Narayana, G. J. *Library and Information management*. New Delhi : PHI, 1991.
- 8. Chapman, Edward A. Pierre, Paul L. St. and Lubans, John, Jr. *Library Systems Analysis quidelines*. New York: Wiley-Inter-Science, 1970.
- 9. Bryson, Jo. *Effective library and information center management*. Aldershot: Gower, 1990.
- 10. Roberts, Stephen A., Ed. *Costing and the economic of Library and Information Services*. London: ASLIB, 1988.
- 11. Rizzo, J. R. *Management for librarians : Fundamentals and issues.* West Port : Green Wood Press, 1980.
- 12. Lancaster, F. W. *The measurement and evaluation of library services*. Washington: Information Resources Press, 1977.
- 13. Lancaster, F. W. If you want to evaluate library. London: LA, 1988.
- 14. Ellis, Debbie and Norton, Bob. <u>Implementing BS5750 ISO9000 in Libraries.</u> London: Aslib, 1993.
- 15. Underwood, Peter G. <u>Managing change in libraries and information services: a systems approach</u>. London: Clive Bingley, 1990.
- 16. MacLachalan, Liz. Making project management work for you. London: LA, 1996.
- 17. Thornhill, Adrian and others. Managing changeUI. Delhi: Addison Wesley Longman, 2000.
- 18. Stephen P. Robbins & David A. Decenzo. *Fundamentals of Management*. Delhi : Pearson Education, 2001.
- 19. Roshan Raina. <u>TQM in Library & Information Services</u>. New Delhi : Infuse, 1999.
- 20. V. Rama Raman. Analysis and Design of Information Systems. New Delhi: PHI, 1991.
- 21. Elias M. Awad. *Systems Analysis and Design*. New Delhi : Galgotia, 1995.
- 22. Barbara Allan : <u>Project Management : Tools and Techniques for Today's LIS Professional</u>. London : Facet Publishing 2003.
- 23. John M. Cohn. <u>Planning for Integrated Systems and Technologies: A how to do it manual for Librarians</u>. 2nd rev.ed. London: Facet, 2002.

PAPER-MLS 202: LIBRARY AUTOMATION AND NETWORKING (CC)

Unit-1:

Library Automation:

Definition, need, purpose and advantages. Automation Vs Mechanization.

Areas of Automation – Acquisition, Cataloguing, Access to Catalogue (OPAC), Circulation and Serial Control.

Unit-2:

Planning for Automation Procedure:

Steps in Automation: Developing a basic Technology Plan.

Identifying goals and objectives, Describing existing library services and technology, Feasibility Study, Assessing needs and priorities, Preparing strategic Plan, Hardware and Software selection and Implementation.

Barcode Technology: Meaning, need, purpose and advantages. Types of barcodes: Dumb / Generic barcode and smart barcode – their application. Code 39.

RFID (Radio Frequency Identification)

Unit-3:

Networking and Networks:

Networking: Concept, need and advantages. Basic components of network. Network Topologies – Star, Ring, Bus, Hierarchical, Tree and Complete. Wireless Networking.

Types of Networks – LAN, MAN, WAN.

Networks: General and Bibliographic. General – ERNET, NICNET, INFONET.

Library Networks: OCLC, INFLIBNET, DELNET: Their objectives, Functions, Services and Activities.

Unit-4:

Internet: Concept, Features, Services.

Search Engines – Concept. Types – Search Engines and Meta Search Engines, Advantages in using Search Engines..

Internet: Internet Searching. Web Browsers – Purpose, Functions, Facilities available with different Browsers. Sample Search by using Internet Explorer and Netscape. Internet Security.

Internet Reference Sources: Identification, accessing. Various sources useful for librarians in providing Reference Services with examples.

Evaluation of Internet Information Sources – Need, Methods / Techniques.

Protocols: Definition, Concept. Types – General - TCP / IP, OSI. Other Protocols: SMTP, Telnet, FTP, HTTP, Z39.50.

Unit-5:

Hypertext, Hyper media. Markup Languages – HTML, XML,– Features.

Web: Concept, Usefulness. Content Development / Content Creation for Web.

Web Design – Methods / Techniques, Steps. Software – Flash, Macromedia, MS-Front page, Dream Weaver.

- 1. <u>Planning for library automation: A Practical Handbook</u> / John M. Cohn, Ann L. Kelsey and Keith Michael Fiels London: Library Association, 1998.
- 2. <u>Computer Networks</u> / Andrew S. Tanenbanum. 3rd ed. New Delhi : Prentice-Hall of India, 1997
- 3. <u>Library Networks: An Indian Experience</u> / H. K. Kaul. New Delhi : Virgo Publications, 1992.
- 4. <u>Information Networks in India</u>: Problems and Prospects / Kausik Bose / New Delhi: Ess Ess Publications, 1994.
- 5. *The Internet* / Mac Bride London : Hodder Headline, 1995.
- 6. Internet 6 in 1 / Joe Kraynak and Joe Harbraken. New Delhi : Prentice-Hall of India, 1998.
- 7. <u>Handbook of Libraries, Achieves and Information Centres in India</u> / Edited by B. M. Gupta (et al) New Delhi: Information Industry Publications, 1987. Vol.5: Information Technology, Industry and Networks.
- 8. Snell. NED. Teach yourself the INTERNET in 24 hours. 3rd ed. Indian Polis: Sams, 1999.
- 9. Haywood, Trenor. <u>Only connect: Shaping networks and knowledge for the new Millennium</u> East Grinstead: Bowker-Saur, 1999.
- 10. How to promote your website efficiently. Aslib, 1999.
- 11. Cooper. Michael D. *Design of Library Automation System: File Structure, Data Structures and Tools*. New York: John Wiley, 1996.
- 12. Lovecy, Ian. <u>Automating library procedures: a survivor's handbook</u>. London: Library Association, 1984.
- 13. Reynolds, Dennis. Library automation: Issues and applications. New York: Bowker, 1985.
- 14. Collier, Mel. <u>Local area networks: the implications for library and information science</u>. London: Bnritish Library, 1984.
- 15. Satyanarayana, N. R. <u>A manual of computerization of libraries.</u> New Delhi: Viswa Prakashan, 1995.
- 16. Gopinath, M.A. and Rama Reddy, E., ed. *Information access through networks.* Hyderabad: Book Links, 1996.
- 17. Bose, Kaushik. *Information Networks in India: Problems and Prospects*. New Delhi : Ess Ess, 1994.
- 18. Page, A. J. *Relational databases : Concepts, Selection and implementation*. New Delhi : Galgotia, 1994.
- 19. Harries, Steve. <u>Networking and telecommunications for information systems: an introduction to information networking</u>. London: LA, 1993.
- 20. Jean Warland & Praveen Varaiya. <u>High Performance Communication Networks</u>. Singapore : Harcourt, 2000.
- 21. C. Xavier. World Wide Web Design with HTML. New Delhi: TMH, 2000.
- 22. Dilip C. Naik. *Internet Standards and Protocols*. New Delhi : PHI, 2001.
- 23. G. G. Chowdhury and Sudatta Chowdhury. *Information Sources and Searching on the World Wide Web.* London: Facet Publishing, 2001.
- 24. Alan Poulter, Gwyneth Tseng and Goff Sargent: <u>The Library and Information Professional's Guide to the World Wide Web.</u> London: Facet Publishing, 1999.
- 25. Alan Poulter, Debgra Hiom and Gwyneth Tseng. <u>The Library and Information Professional's Guide to the Internet.</u> 3rd Ed. London: Facet Publishing, 2000.
- 26. Catherine Sheldrick Ross, Kirsti Nilsen and Patricia Dewdney. <u>Conducting the Reference Interview</u>. London: Facet Publishing, 2002.

- 24. Michael D. Cooper. *Design of Library Automation Systems : File Structrures, Data Structures, and Tools*. John Wilehy & Sons, 1996.
- 25. John M. Cohn, Ann L. Kelsey, Keith Michael Fiels. <u>Planning for Integrated Systems and Technologies: A How-to-do-it manual for Librarians</u>. Neal-Schuman.
- 26. John M. Coln, AnnL Kelsey, Keith Michael Fiels. *Planning for Automagtion : A How-to0-do-it for Librarian.* 2nd Ed. [S.I.] : Neal-Schuman, 1997.
- 27. Thomas R. Kochtanek [and] Joseph R, Mathews. *Library Information Systems: From Library Automation to distributed information access solution.* [S.I] Libraris Unlimited, 2002.
- 28. R. S. Kochan and K. N. Sudarshan. *Library Automation.* [S.I]: APH, 1997.
- 29. Joan I. Trany. *Library Automation for Library Technicians: An Introduction*. Scarecrow, 1986.
- 30. William Saffady. *Introduction to Automation for Librarians*. ALA, 1999.
- 31. Paul Pedley. <u>The invisible Web: Searching the hidden parts of the Internet.</u> London: Aslib, 2001.

PAPER-MLS 203 (A): INFORMATION SYSTEMS AND PROGRAMMES (DSE)

Unit-1:

<u>Information Organisation as a system:</u>

Basic concepts, Components, Types, Characteristics of an Information System.

Kinds of Information System:

Libraries, Documentation Centres, Information Centres, Data Banks. Information Analysis Centres. Referral Centres, Clearing Houses, Archives, Reprographic and translation Centres – their functions and services.

Unit-2

Planning and Design of a National Information System:

NAPLIS (National Policy on Library & Information Systems)

Concept, Functions and objectives of NATIS. National Information Policy (NIP).

Planning Design of National Information System (NATIS).

National Information Systems:

NISCAIR, DESIDOC, NASSDOC, SENDOC, CORD, NCSI, NISSAT, ENVIS: Structure, functions and services.

Unit-3:

Regional Information Systems:

ASTINFO, APINESS and SAARC (SDC).

Global Information Systems:

UNESCO-PGI, INIS, AGRIS, INSPEC, MEDLARS, UNIDO-IIS, SPINES, ICSU.

Unit-4:

Information Products and Services:

Concept, Definition. Types with examples.

Information Products Vs Services.

<u>Information Products:</u> Institutional, Commercial.

Information Services – Bibliographic, Document Delivery, Alert (CAS & SDI).

Marketing of Information Products and Services.

<u>Information Providers (Vendors):</u> DIALOG, STN, Derwent, Data Star, UMI, Silver Platter, BLDSC, ISI.

- 1. Atherton, P. Handbook of Information Systems & Services. Paris, Unesco, 1977.
- 2. Harvey, J. M. *Specialised information centers*, 1976.
- 3. India. *National Committee on Science and Technology: Science and Technology Plan 1974-79* draft. 2 Paris. 1974.
- 4. Information Services in India. Seminar Papers, 10th IASLIC Conference, Kanpur, 1982.
- 5. Lazar, P. *India-National information system for science and technology*, 1972.
- 6. <u>Library and information services in India: assessment and effectiveness</u>; 34th ILA Conference, Calcutta, 1988.

- 7. Marketing of library and information services, 13th IASLIC Seminar, Calcuta. 1988.
- 8. Bernadas, A. et al: *Information systems; theoretical and formal aspects*, 1985.
- 9. UNESCO, ICSU, UNISIST, <u>Study report on the feasibility of World of Science information</u> System. 1971.
- 10. Vickery, B.C. *Information Systems*. 1973.
- 11. Bose, Kaushik. *Information networks in India: Problems and Prospects*. New Delhi : Ess Ess, 1994.
- 12. Kaul, H.K. *Information Networks: an Indian experience*. New Delhi : Virgo, 1992.
- 13. Parida, Baman. <u>Studies on information systems, services and programs in India and abroad</u>. Delhi: Ajanta, 1993.
- 14. Wiesman, Herman. *Information Systems, Services and Centres*. New York: Becker & Hyes, 1972.

PAPER-MLS 203 (B): Research and Technical Libraries (DSE)

<u>Unit-1:</u>

Research and Technical Libraries (Special Libraries): Definition, Objectives, Functions and Services. Organization and Management of Research and Technical Libraries. Evaluation of services. HR Planning and Development. Development of Research and Technical Libraries in India.

Unit-2:

Collection Development. Special Collections: Research Reports, Patents, Standards and Specifications, Indexing and Abstracting Services. Bibliographic and Full-Text databases. Documentation Centres, Information Centres, Information Analysis / Evaluation Centres, Referral Centres, Data Centres – Their Objectives, functions, and services.

<u>Unit-3:</u>

Information Systems: NISSAT, NISCAIR, DESIDOC, NASSDOC, CORD, SENDOC – their objectives, functions and services.

National Agricultural Library, National Medical Library, National Science Library of India – their functions and services.

Unit-4:

Planning and developing – Building, Collection, infrastructure, services of Research and Technical Libraries. Collection evaluation. Content creation and development. IPR issues. Citation analysis. Impact factor, H-Index, Altmerix.

PAPER—MLS 251: SOFTWARE FOR LIBRARY AUTOMATION (Practice) (CC)

Unit -1:

Bibliographic Database Management Systems – Concepts.

CDS/ISIS and WINISIS – Concept, features (Hands on experience)

Unit - 2

Integrated Library Management Software - concept

LIBSYS, SOUL, NEWGENLIB, Koha (Observation and hand on experience of any one software)

Unit-3:

Database – Concept, structure, use and features.

RDBMS - Concept, structure, use and features

SQL / MySQL / MS-Access (Hands on experience in creation of database)

Unit-4:

Searching through Internet – e-journals –subscribed, consortia and free

Internet Resources using search engines.

World Wide Web (WWW) – Institutional and Individual Websites

Note: The Practical Examination paper would consist of two parts Part – I: Short notes for 40 Marks for (the first one hour) and Part – II Practical questions for 60 Marks for (the remaining two hours)

PAPER—MLS 252 (A): Digital Libraries (Theory) (SEC)

<u>Unit-1:</u>

Digital Libraries - Concept, Definitions, Need and Purpose

Characteristics of Digital Libraries. Architecture of Digital Libraries.

Digital Library Resources and Services

Development of Digital Libraries

Unit-2:

Digital Library initiatives in India and the major Digital Libraries initiatives in UK, USA and in the world

Design and Development of Digital Libraries

Metadata, Dublincore, Taxonomies, ontologies and their use

Best Practices and case studies of Digital Libraries

Evaluation of Digital Libraries

Unit-3:

Digitization and its process

Different types of File Formats, Text Formats, Image Formats, Audio Formats, Video Formats,

Born Digital, Mark up Languages, SGML, HTML, DHTML, XML

Open Source Materials, Gateways and Portals

Unit-4

Access and User Interfaces to Digital Libraries

Resource Discovery

Search Engines, Search Tools and Techniques, Boolean Operators, Fuzzy Logic, Information Visualization

Copy right, Security, Privacy, Intellectual Property Rights (IPR) issues and Plagiarism

- 1. Lesk, Michael. *Understading Digital Libraries*. 2nd edition. USA: Elsevier, 2005.
- 2. Witten Ian H., Bainbridge, David [and] Nichols, David M. *How to build a digital library.* 2nd Edition. Elsevier Publications. 2010.
- 3. Kresh, Diane. *The whole digital library handbook*. USA: Council on Library and Information Resource, 2007.
- 4. Karen, Calhoun. *Exploring digital libraries*. Neal Schuman Publishers, 2014.
- 5. Terry, Reese and Kyle, Benerjee. *Building digital libraries.* Neal Schuman Publishers, 2007.

PAPER—MLS 252 (B): Information Literacy (SEC)

Unit-1:

Information Literacy – Concept, Definitions, Need and Purpose Information Literacy skills Information Literacy Programmes in Public, Academic and Special Libraries

Unit-2:

Information Literacy: Developments and Trends Information Searching skills and preservation techniques Information Literacy Standards

Unit- 3:

Information Searching with Databases, web Resources and Search Engines
Different Types of Web Searching skills like, academic websites and commercial websites
Designing and Developing Information Literacy Programmes

Unit-4:

Information Literacy Initiatives and Programmes in India and different countries Information Literacy case studies copy right laws and Intellectual Copy Right Issues.

Plagiarism, Plagiarism software

Select Readings

- 1. Scott, Lanning. *Concise guide to information literacy*. USA: Libraries Unlimited, 2012
- 2. Grassian, Esther S. and Kaplowitz, Joan R. *Information literacy instruction theory and practice*. 2nd ed. Neal-Schuman Publishers, 2009.
- 3. Handley Holly Carla List, Ross Heller Elin, Gonya O'Hara. *Alison Armstrong Information literacy and technology*. 5th ed. Kendall Hunt Publishing, 2013.
- 4. Gwenn, Wilson. 100% information literacy success. 3rd ed. USA: Cengage Learning, 2015.

PAPER-MLS 252 (C): PROJECT (Project Oriented Dissertation): In lieu of One Theory/Practice Paper (i.e. 4 Credits)